

UNIVERSITY GRANTS COMMISSION

REPORT OF THE YEAR 1983-84

**Presented to the Government of India in compliance with
Section 18 of the UGC Act, 1956
NEW DELHI**

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Members of the University Grants Commission during 1983-84

Chairman

1. Dr. (Mrs.) Madhuri R. Shah

Vice-Chairman

2. Dr. Rais Ahmed

Members

3. Mrs. Sera Grewal
4. Shri C.G. Somiah*
5. Prof. Anita Banerji
6. Prof. R.C. Mehrotra
7. Dr. Ramesh Mohan
8. Shri Kireet Joshi
9. Dr. B.C. Parekh**
10. Dr. V.C. Kulandaiswamy**
11. Prof. C.N.R. Rao
12. Mr. Justice P.N. Shinghal

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* Shri R. Ganapati was appointed in place of Shri C G Somiah w.e.f. 1st February 01-1984

** Appointed in the place of Dr. Wahid U. Malik and Dr. V.S. Arunachalam w.e.f. 17-6-1983.

Against Serial numbers 11 and 12 Prof. H.C. Khare and Mr. Justice M H Beg have been appointed as members w.e.f. 10-5-1984.

UNIVERSITY GRANTS COMMISSION ANNUAL REPORT

April 1983—March 1984

In compliance with Section 18 of the UGC Act, 1956 (No. 3 of 1956)* we have the honour to present to the Central Government the Annual Report of the University Grants Commission for the year 1983-84 to be laid before the Houses of Parliament.

SECTION 1

Institutions and Enrolment in Higher Education Growth in Numbers

1.01 A notable development in recent years has been that the efforts made by the Commission to regulate the growth of higher education, in keeping with the educational needs of the country for trained manpower with appropriate levels of professional training, skills and specializations, have started bearing fruit. The socio-economic conditions have also played a part in curbing the private demand for higher education. Although enrolments at the level of higher education as a proportion of the relevant age-cohort are hardly adequate in terms of a long-term perspective, and there is need for expansion, one has to keep in mind several constraints of a practical nature such as the availability of resources, needs of other sectors in a developing country like ours, job-opportunities etc. This brings into sharp focus the problem of access to higher education and the dilemma faced by educational planners of maintaining a proper balance between increase in the intake capacity of universities and colleges on the one hand and the quality of education on the other. While it is important that expansion takes place, it is equally important to ensure that institutions which are established to cater to the needs of university students at different levels possess a modicum of facilities by way of basic infrastructure such as class rooms, libraries, laboratories, hostels, staff quarters, teachers' hostels, non-resident students' centres and other inputs in terms of teaching and non-teaching staff, administrative, technical and research support and resources for purchase of equipment, books and journals etc. Equality of opportunity is another consideration that has to be kept in view in determining the adequacy of enrolments, or otherwise. The Commission has, therefore, been striving to strike the right balance in planning for the expansion of higher education in the country.

* The University Grants Commission Act 1956 (Act No. 3 of 1956) as amended upto 17th June, 1982.

1.02 This section gives figures relating to the number of institutions of higher education, enrolments, growth rate of enrolments, growth of colleges—total and state-wise, staff strength and doctorate degrees awarded during the year 1983-84.

1.03 Student Enrolment: As against an enrolment of 22,34,385 students in 95 universities, nine institutions deemed to be universities and 4,308 colleges in the year 1973-74, there were 33,59,323 students enrolled in 1983-84 in as many as 124 universities, 15 institutions deemed to be universities and 5,246 colleges. Growth in the number of institutions and enrolments for the period 1973-74 to 1983-84 is given in the following table. Figures pertaining to student enrolment exclude enrolment in intermediate, pre-university and pre-professional classes, unless otherwise specified.

A chronological list of universities is given in Appendix I.

Year	Number of universities	Number of Colleges	Number of Students
1973-74	95+9 institutions deemed to be universities	4,308	22,34,385
1974-75	102+9 institutions deemed to be universities	4,170	23,66,541
1975-76	102+9 institutions deemed to be universities	4,272	24,26,109
1976-77	105+10 institutions deemed to be universities	4,317	24,31,563
1977-78	105+10 institutions deemed to be universities	4,375	25,64,972
1978-79	108+10 institutions deemed to be universities	4,460	26,18,228
1979-80	108+11 institutions deemed to be universities	4,558	26,48,579
1980-81	112+11 institutions deemed to be universities	4,722	27,52,437
1981-82	118+13 institutions deemed to be universities	4,886	29,52,066
1982-83	120+13 institutions deemed to be universities	5,012	31,33,093
1983-84	124+15 institutions deemed to be universities	5,246	33,59,323

Note: (1) The number of colleges from 1974-75 onwards excludes junior colleges and those offering diploma/certificate courses. Hence the change in trend.
 (2) All figures in this section for 1983-84 are provisional.

1.04 New Universities: Five new universities viz. Amravati University, Amravati (Maharashtra), Guru Ghasidas Viswavidyalaya, Bilaspur (M.P.), Sri Padmavati Viswavidyalaya, Tirupati (A.P.), Gandhiji University, Kottayam (Kerala) and Mother Teresa Women's University, Kodaikanal (Tamil Nadu) were established during the year 1983-84. These universities, besides, the 14 universities mentioned in the Annual Report of the UGC for the year 1982-83 have not been declared fit to receive central assistance in terms of the rules framed under section 12-A of the UGC Act as the state governments have yet to fulfil the conditions laid down under the rules.

As already indicated in the annual report for the year 1982-83, the following universities even though they have been declared fit to receive central assistance in terms of section 12-A of the UGC Act, have not been declared fit for assistance for institutional development as the state governments concerned have yet to fulfil certain conditions:—

<i>S. No.</i>	<i>Name of State</i>	<i>Name of University</i>
1.	Bihar	L.N. Mithila University, Darbhanga.
2.	Tamil Nadu	Tamil University, Thanjavur.
3.	Uttar Pradesh	Garhwal University, Srinagar (Garhwal).
4.	Uttar Pradesh	Kumaon University, Nainital.

1.05 New Institutions Deemed to be Universities under Section 3 of the UGC Act: Two new universities namely Banasthali Vidyapith, Rajasthan and Indian Veterinary Research Institute, Izatnagar (U.P.) have been given recognition as institutions deemed to be universities under section 3 of the UGC Act during the year 1983-84.

The Commission in July 1983, agreed to recommend to the Government of India, Ministry of Education and Culture to declare the International Institute of Population Studies, Bombay as an institution deemed to be university under Section 3 of the UGC Act. The notification from the Government of India in this regard is awaited.

The Commission in February 1984 examined the recommendations made by the Standing Committee on New Universities and University Post-graduate Centres at its meeting held on the 17th December, 1983 that Shri Sharadapeeth Vidya Sabha, Dwarka, comprising (i) the Indological Research Institute, Dwarka, and (ii) the Shri Sharadapeeth Arts and College of Education, Dwarka, may be declared as an institution deemed to be university under section 3 of the UGC Act. The Commission, desired that before further action is taken, the conditions laid down by the Committee which visited the Shri Sharadapeeth Vidya Sabha, Dwarka may be fulfilled. A clarification may also be sought from the state government whether the present level of maintenance expenditure and future liabilities of this nature and the matching share for the development schemes of the institute as may be accepted by the Commission will continue to be met by the State Government of Gujarat or the Trust authorities of Shree Sharadapeeth Vidya Sabha, Dwarka. Further action in this regard is being taken by the Government of India, Ministry of Education and Culture.

1.06 University Postgraduate Centres: The Commission in February 1984 agreed to the setting up of a University Centre for Postgraduate Studies at Solapur, subject to the fulfilment of certain conditions and suggestions. The decision has been communicated to the Government of Maharashtra and the Shivaji University for necessary action.

Again in February 1984 the Commission agreed to the setting up of a University Centre for Postgraduate Studies at Nanded, subject to the fulfilment of certain conditions and suggestions, which have been communicated to the Maharashtra Government and the Marathwada University.

1.07 Colleges: At the end of 1983-84, 3,724 colleges affiliated to various universities had been included in the list maintained under Section 2(f) of the UGC Act. The corresponding figure for the year 1982-83 was 3,633.

The number of postgraduate colleges as per list maintained under Section 2(f) of the UGC Act, during the year 1982-83 was 1,117. During the year 1983-84, it was 1133 which shows an increase of 16 over the preceding year.

1.08 Growth Rate of Enrolment: The growth of student enrolment in Higher Education in the university system during the period 1964-65 to 1973-74 and 1974-75 to 1983-84 is given in Appendix II. The average growth rate of enrolment during the decade 1974-75 to 1983-84 was 4.2 per cent per annum. This was substantially lower than the average growth rate of 10.3 per cent during the previous decade 1964-65 to 1973-74. The ten-year period 1974-75 to 1983-84, however, shows a widely fluctuating growth rate of enrolment year after year, with 0.2 per cent recorded as the lowest rate during 1976-77 and 7.3 per cent as the highest during 1981-82. In absolute terms, however, the year 1983-84 recorded the highest increase of 2,26,230 in enrolment for the decade 1974-75 to 1983-84. The growth rate of enrolment in the year 1983-84 was 7.2 per cent over the previous year.

During the five year period from 1979-80 to 1983-84, the average annual compound growth rate of enrolment was 6.1 per cent. However, there were wide deviations from this average growth rate among different states as indicated in Appendix III. During the period under reference, Bihar had a growth rate of 16.2 per cent which is nearly three times the average growth rate for the country as a whole. States which had double or nearly double the average growth rate were Andhra Pradesh (13.4) and Himachal Pradesh (11.5).

1.09 Stage-wise Enrolment: Stage-wise enrolment from 1979-80 to 1983-84 given in Appendix IV indicates only marginal variations in respect of per centage enrolment both at the undergraduate and the postgraduate/research levels. Enrolment at the undergraduate stage has varied between 87-88 per cent of the total enrolment while postgraduate/research enrolment has been

in the vicinity of 10-11 per cent; the balance being in various short term courses.

Appendix V gives the enrolment in the university departments and university colleges and affiliated (private or government) colleges. The affiliated colleges account for 81.8 per cent of the total enrolment in 1983-84. In terms of their contribution to the stage-wise enrolment, the affiliated colleges account for 86.4 and 55.8 per cent of the total enrolment at the undergraduate and postgraduate stage respectively. At the research level they constitute 14.1 per cent of the total enrolment.

1.10 Faculty-wise Enrolment: The faculty-wise distribution of student enrolment from 1979-80 to 1983-84 (Appendix VI) shows that the percentage of enrolment in the faculty of arts (including oriental learning) to the total enrolment has been going down gradually from 40.6 in 1979-80 to 40.5 in 1980-81, 40.3 in 1981-82, 40.2 in 1982-83 and 39.1 in 1983-84. However, the percentage of students enrolled in commerce courses has gone up from 19.5 in 1979-80 to 20.1 in 1980-81, 21.3 in 1981-82, 21.4 in 1982-83 and 22.4 in 1983-84.

Similar trend is observed in the case of science faculty where percentage enrolment has gradually gone up from 19.2 in 1979-80 to 19.4 in 1980-81, 19.6 in 1981-82, 19.9 in 1982-83 with a marginal decline to 19.8 in 1983-84. Changes in percentages of enrolment in the professional courses other than medicine have been of a marginal nature. Percentage enrolment in the medicine faculty has steadily declined from 4.2 in 1979-80 to 3.6 in 1983-84.

1.11 Establishment of New Colleges: There was an increase of 207 in the number of colleges during the year (Appendix VII). Of these new colleges 141 were arts, science and commerce colleges. The distribution of newly established professional colleges is as under:

Engineering and Technology	33
Medicine, Pharmacy, Ayurveda, Homeopathy, Nursing & Dentistry	7
Law	7
Music and Fine Arts	4
Agriculture	1
Education/Physical Education	14

1.12 State-wise Growth of Colleges: The state-wise distribution of the newly established colleges during the period 1979-80 to 1983-84 is given in Appendix VIII. There was a total increase of 688 in the number of colleges during the five-year period.

The following states account for substantial additions to the number of colleges.

Bihar	141
Karnataka	116
Maharashtra	97
Andhra Pradesh	83
Orissa	61
Madhya Pradesh	51
Rajasthan	29

These states taken together account for nearly 84 per cent of the total increase in the number of colleges.

Appendix IX gives the state-wise increase in the number of arts, science and commerce colleges during the period 1979-80 to 1983-84. It will be seen that the increase in arts, science and commerce colleges accounted for nearly 63 per cent of the total increase in the number of colleges during the period.

1.13 Staff Strength: Appendix X shows the strength and distribution of teaching staff in university departments and university colleges during the period 1979-80 to 1983-84. In 1983-84, there were 48,694 teachers in the university departments and university colleges. Out of them 4,860 were professors, 11,189 readers, 30,630 lecturers and 2,015 tutors and demonstrators. The proportion of senior teachers viz. professors and readers to the total teaching staff was 33.0 per cent which shows that there has been an increase in the proportion as compared to 29.1 per cent senior teachers in 1979-80. The teaching staff in the university departments and university colleges increase by 2035 in the year 1983-84 as compared to an increase of 4,473 in 1982-83 over the preceding year. The teaching staff in the affiliated colleges (Appendix XI) totalled 1.71,483 in 1983-84 including 20,186 senior teachers, 1,44,293 lecturers and 7,004 tutors and demonstrators. There was an increase of 7,062 teachers in affiliated colleges in 1983-84 over the year 1982-83 as compared to an increase of 6,703 in 1982-83 over the year 1981-82.

1.14 Doctorate Degrees Awarded: The facultywise position of doctorate degrees awarded during 1978-79 to 1982-83 is given in Appendix XII. During the year 1982-83, 6,554 doctorate degrees were awarded. However, increase in the number of doctorate degrees awarded during 1982-83 was much less (150) as compared to the corresponding increase in 1981-82 (324). Maximum number of doctorates were awarded in science followed by arts. In professional faculties, the maximum number of doctorate degrees awarded was in agriculture followed by education, commerce and engineering/technology in that order. The number of degrees awarded during the period for all the faculties taken together increased by 40 per cent.

SECTION 2

Maintenance and Coordination of Standards

2.01 Education which is regarded as a key factor in economic development and social transformation must necessarily be introspective and critical of its own role. A good, efficient and relevant system of education must be forward-looking and flexible enough to go in for the 'adventure of ideas'. It, however, needs to be underlined that in the present context, standards of higher education are to be judged not only by the yardstick of academic excellence but also in relation to the relevance of the courses and programmes, the social commitment of universities and their contribution to national development.

2.02 Section 12 of the UGC Act lays down that "It shall be the general duty of the Commission to take, in consultation with the universities or other bodies concerned, all such steps as it may think fit for the promotion and coordination of university education and for the determination and maintenance of standards of teaching, examination and research in universities." Accordingly, all efforts of the Commission have been directed towards the maintenance and coordination of standards in regard to development as well as special programmes.

2.03 In the past few years, concerted efforts have been made to raise the level of university education, firstly to the highest standards obtaining in our own country; and, secondly, to the highest standards 'anywhere' in the world. Simultaneously, efforts have been made to bring about coordination between the need for maintaining quality through a proper consolidation of the existing facilities and expansion in order to meet the development requirements of the country, especially the need for trained personnel for shouldering positions of responsibility in various fields. The twin problems of quality and equality would no doubt, continue to exist in the wake of general demand for higher education by different sections of the society but efforts will have to be made in the future to bring about a better fit between education and manpower needs.

2.04 This section deals with specific action programmes directed to the improvement and updating of courses of study, support for research and publications, examination reforms and quality improvement programmes, all of which have a direct and significant bearing on standards of education in the university system.

2.05 Guidelines regarding working days in universities and colleges, minimum programme of examination reform in universities and workload of teachers

in various subjects in undergraduate college/postgraduate college/university: The Commission with the help of Working Groups/Committees appointed by it, has laid down guidelines in regard to:—

- (i) Minimum number of actual teaching days in an academic year in a university/deemed to be university/constituent/affiliated colleges of the university;
- (ii) Minimum programme of examination reform in universities; and
- (iii) Work load of teachers in various subjects in an undergraduate college/postgraduate college/university.

2.06 The Commission is also taking steps with the help of committees appointed to frame necessary Regulations under Section 26(i) (f) of the UGC Act in regard to the defining of minimum standards of instruction for the award of first degree (B.A., B.Sc., B.Com.) through formal and informal distance education by any university which amongst others would lay down admission requirements for the Master's degree. The Committees appointed for the purpose have already met and the regulations are being finalised.

2.07 The Commission has decided to set up a 'National Educational Testing' unit which will, in the first phase, hold an examination to qualify Scholars for the award of junior research fellowships but subsequently, it may develop tests which may be used for the selection of university and college lectures, and for admission at the postgraduate level to central or other participating universities. There may also be tests for selection of undergraduate students in various subjects in which induction of talent is felt necessary.

The Commission expects that the development of tests at the national level in the different areas would help overcome the problem of comparability of marks awarded by different universities, and, of course, select the best talent for research. In course of time the tests will become more objective and reliable and they could even act as a pacesetter for the improvement of syllabi and methods of teaching/evaluation in the university system, in general.

2.08 Restructuring of Undergraduate Courses: The Commission suggested restructuring of courses several years ago. Basically the idea was to introduce some foundation courses to broaden the understanding particularly of current issues of growth, development and national integration before the country. Courses of an applied nature were desired to be introduced so that one could get away from the traditional combinations and take into account the emerging needs of the society, and emerging new disciplines. This was considered to be a positive factor in improving employment opportunities—and serving the manpower needs at the same time. These courses, often to

be run with the help of professional staff available in the vicinity and sometimes using the infrastructure of other organizations, are expected to provide a welcome exposure to work-experience, and initiate stronger linkages between the university, the community and the environment.

2.09 Restructuring of courses has become particularly important in view of the introduction of the new pattern of education which has enhanced the duration of courses leading to the first degree in arts, science, commerce etc. from 2 to 3 years after 12 year school in a number of States. The opportunity should obviously be utilised to modernise the course as well as to enrich the contents and to make them relevant to social needs and aspirations, and to respond to emerging needs of trained manpower in different sectors.

2.10 In regard to financial assistance for the implementation of the programme, the Commission provides assistance to universities for (a) seed money, (b) orientation of teachers, and (c) preparation of course materials, teaching aids etc. Universities may also be assisted for offering some courses on an experimental basis. Total assistance to a university for the programme is limited to Rs. five lakhs for a period of five years.

2.11 The Commission assists a college under this programme upto Rs. one lakh per annum, for appointing core staff, utilising services of part-time staff and other non-recurring expenses for a period of five years. The core staff may be appointed wherever necessary in the new areas to be introduced as a part of restructuring of courses. Part-time staff may be drawn from other institutions and local industries etc.

2.12 At present assistance is being provided by the Commission under the scheme to 60 colleges and one university.

Some of the courses introduced under the scheme are related to (i) Marketing (ii) Local Self Government (iii) Labour Welfare (iv) Electronics (v) Rural Industrialization (vi) Office Management (vii) Plant and Crop genetics (viii) Computer Science (ix) Family and Child Welfare (x) Insurance (xi) Food Technology (xii) Environmental Science (xiii) Entrepreneurship and Small Business (xiv) Industrial Chemistry (xv) Fruit Preservation (xvi) Nutrition (xvii) Bakery (xviii) Tailoring & Hosiery (xix) Commercial Arts (xx) Designing and Painting (xxi) Microbiology (xxii) Dairy Science (xxiii) Fisheries (xxiv) Forestry (xxv) Rural Banking (xxvi) Horticulture (xxvii) Poultry etc.

2.13 **College Science Improvement Programme (COSIP)/College Humanities and Social Sciences Improvement Programme (COHSSIP):** The College Science Improvement Programme was initiated by the Commission in 1970-71 in order to bring about qualitative improvement in the teaching of science

at the undergraduate level. The purpose of the programme is to accelerate the development of science capabilities of undergraduate students and to initiate a process of continuous self-renewal. This is brought about through an integrated approach and simultaneous improvements in the subject-matter, methods of instruction, syllabi, curricula, laboratory exercises, workshops, library and teaching material.

The programme was taken up at two levels (a) in selected colleges include the entire science faculty and (b) university leadership project in one science subject in all the colleges affiliated to a university.

2.14 Encouraged by the success of COSIP, the Commission in 1974-75 decided to extend the programme to the humanities and social sciences. The College humanities and social sciences improvement programme (COHSSIP) aims at bringing about improvements in the teaching of humanities and social sciences at the undergraduate level with particular reference to (a) adoption of new teaching methods, e.g. preparation of synopsis of lectures and other teaching materials, use of audio-visual and other teaching aids, tutorials and seminars etc., (b) extension of library services, (c) introduction of special courses, (d) inter-disciplinary programmes. (e) adoption of various measures of examination reforms, (f) remedial teaching and (g) field/project work etc. If both programmes exist in one college, they are expected to be co-ordinated so that each may benefit from the experience of the other.

2.15 COSIP is being implemented in 228 colleges and 40 university departments and COHSSIP in 245 colleges and 16 university departments.

2.16 A review of the scheme has brought out the fact that colleges have undertaken a number of innovative measures under these schemes such as new teaching methods, fabrication of equipment, audio-visual and other teaching aids and inter-disciplinary approach to teaching. The distribution of teaching plans and guided readings has lead to an improvement of study habits. Colleges have also introduced courses with practical-orientation, job-oriented courses, programmes of creative writing, book review etc. Similar measures have been taken by a number of universities under the University Leadership Project (ULP). The schemes, however, touch a small fraction (a few hundred out of several thousand colleges) of the college system. The Commission in the 7th Plan proposes to give a broad-based support—"institution-building" support to selected colleges in order to raise their all round performance.

2.17 Autonomous Colleges: The concept of autonomous colleges by which universities could give a few carefully selected colleges the much needed autonomy in formulating curricula and courses of study, evaluation methods and other related matters is also an important step in the improvement of

collegiate education. However, the scheme has so far been implemented by 15 colleges only and has run into rough weather in a few places. A review of the scheme in colleges affiliated to Madras and Bhartiar University has brought out a number of positive achievements. It seems highly desirable that more and more universities experiment with this idea and if possible, extend the concept of autonomy to individual departments noted for their excellence. The Commission is considering measures that may be adopted for this purpose.

2.18 Subject Panels of Experts: The Commission constitutes once in every two or three years, panels of experts in various subjects of study and research from the universities and other institutions, to advise it on all matters relating to the present status and standards of teaching and research in the subject concerned, facilities, available within the country and in different regions for teaching, training and research in the subjects and also to suggest measures to be taken for further development of facilities for promoting studies at an advanced level. These subject panels periodically review syllabi and courses of study followed by different universities at undergraduate and postgraduate levels with reference to such courses of study being made up-to-date and, wherever necessary, relevant to the regional and national needs and also to bring about necessary inter-disciplinary aspects. The advice given by the panels has helped in initiating appropriate measures so that teaching and research in the subjects concerned can be brought to the required standards. During the year the various Panels made a series of proposals for raising the standards of teaching—for example through identification of talented students, summer schools for them, strengthening infrastructure of libraries and laboratories, adopting of more effective teaching methods than the single method of lecturing used now-a-days, and improving professional competence of teachers. They have also suggested measures for improving research by increasing scholarship amounts to attract and adequately support talented scholars, by improving supervision and evaluation at the universities and by adequate monitoring by the Commission.

2.19 Panels in the Humanities and Social Science Subjects: Panels of experts in the various disciplines in the humanities and social sciences were first set up in February, 1974 and generally recast in 1982. At present 19 subject panels in the humanities and social sciences are functioning. These are (1) English and Foreign Languages, (2) Linguistics, (3) Modern Indian Languages, (4) Economics, Political Science and Public Administration, (6) Sociology and Social Anthropology, (7) Anthropology, (8) Commerce and Business Administration, (9) Law, (10) History, (11) Mass Communication, (12) Psychology, (13) Philosophy, (14) Library and Information Science, (15) Social Work, (16) Teacher Education, (17) Classical Languages, (18) Art History and Museology and (19) Performing Arts.

The important recommendations of some of the panels are summarized in the following paragraphs:

2.20 Panel on Sociology: The Panel has finalized a questionnaire for collection of factual information on the present position of teaching and research in the university departments. The questionnaire has been issued to universities. The status report and the departmental profiles would be prepared on the basis of replies received from the universities. On the suggestion of the Panel, the Bhopal University has been requested to undertake a survey of M.Phil. programme in different universities. As suggested by the Panel, the recommendations made at the 12th annual conference of the Indian Society of Criminology have been circulated to university departments of social work offering courses in criminology.

The Panel has also considered the schemes initiated by the Commission for improvement of standards. In this connection, the Panel was of the view that courses in research methodology should be offered in newly emerging areas in different disciplines and not in relation to topics which are covered under the existing syllabi. It has also suggested that apart from providing a documentation of current journals the proposed information centres should also have a union catalogue of books for the information of different libraries in the country. It would also be desirable if the centres provide reprographic services to universities. The Panel has also pointed out the need for the preparation of good books for foundation courses at the university level. Translation of certain classics would be another desired step. Good books can also be prepared through collaborative effort with contributions from individual authors. Follow-up action on the recommendations is being taken.

2.21 Panel on Political Science: The Panel has recommended that workshops on research methodology be organized after spelling out the relevant details such as the topics to be covered, resource persons to be invited, selection of participants, duration of the workshop, etc. The workshops are proposed to be held at Gauhati University, Banaras Hindu University, Osmania University, Hyderabad University and Poona University.

The Panel is also compiling the status report on teaching and research in the discipline. It has also made some tentative recommendations regarding peace and disarmament studies in university centres.

2.22 Panel on Commerce: The Panel has appointed a Committee for preparing departmental profiles and the status report on teaching and research in Commerce. A detailed questionnaire was prepared for the purpose and circulated to the universities. The information received from various university departments is being processed.

2.23 Panel on Law: The Panel has identified the following thrust areas of research to be undertaken by teachers in university and college departments with support from the Commission: (i) Public Interest litigation, (ii) Universities and the Law, (iii) University Autonomy and the Law, (iv) International Commercial Arbitration, (v) Computer Law and (vi) Law on Minority Rights and Education with special reference to educational institutions.

The Law Panel has been considering the proposal of the Bar Council of India for the introduction of an integrated Law course of five years after 10+2. A sub-committee appointed by the Panel formulated a note for discussion with the Bar Council of India. The points mainly related to (a) Immaturity of students, who may be required to join the integrated course of five-years after 10+2 (b) Exclusion of a large number of talented students from entering the legal profession because of their inability to choose their future profession at the stage of 10+2; (c) Narrowing down the scope and perspective of teaching of sociology, political science, history, economics, etc., if these are taught from the legal point of view and the disadvantage of these subjects being taught by non-specialists; (d) The non-existence of the 10+2 pattern in a number of states, (e) Problems that may be created by compulsory English at the stage of 10+2; (f) Financial implications of the five-year course; (g) Repercussions on university autonomy and the power of boards of studies, etc. (g) The need for flexibility in regard to course structure and the (h) Provision of multiple entry.

As a result of prolonged discussions with the Bar Council of India at different levels, it has been agreed that law colleges/departments may continue to admit students for the three-year degree course for the academic session commencing from 1984-85 and for the year 1985-86 under the old rules. These students doing the old course will be eligible for enrolment as advocates. The academic and financial implications of the integrated course of five years are being further discussed with the Bar Council of India.

2.24 Panel on Economics: On the recommendations of the Panel on Economics, the Commission supported five workshops for improvement of undergraduate and postgraduate syllabi in economics as detailed below:

<i>Theme of the Workshop</i>	<i>Place held</i>
(i) Economic Theory, Value, Growth, Trade and Distribution	M.S. University of Baroda, Baroda
(ii) Quantitative Economics	Mysore University
(iii) Money and Public Finance	Gujarat University, Ahmedabad
(iv) Applied Economics	Osmania University, Hyderabad
(v) Undergraduate Economics Course	Jogmaya Devi College, Calcutta.

These workshops were held between May, 1983 and May 1984. It is proposed to organize a seminar on the Future of Indian Economy under the auspices of the Jawaharlal Nehru University in collaboration with the National Institute of Public Finance and Policy, New Delhi.*

2.25 Panel on Anthropology: The Panel felt that there is an urgent need to organize a workshop on practical instructions in anthropology at the under-graduate level, in view of the fact that several teachers have not received training in physical anthropology, pre-history and archaeology. For this purpose, it was recommended that, to begin with, a workshop may be organized to cover teachers from Uttar Pradesh, Bihar, Orissa, West Bengal, Assam and the North Eastern States. This recommendation has been accepted by the Commission.

2.26 Panel on Psychology: The Panel on psychology agreed that for examining the status of available books in Hindi and regional languages for post-graduate teaching and for evolving a time-bound programme for publishing such books, it is necessary to prepare an inventory of such books published so far in different languages and also make a general evaluation of the same. A suitable scheme is being prepared for co-ordinating this work with psychologists from different linguistic regions. The Commission would also consider giving necessary financial support for co-ordinating this work.

The Panel also recommended that regional workshops be held for Ph.D. scholars and also for vetting research proposals.

The Panel recommended that four national workshops be organized as recommended by the earlier Panel on the following topics:

Theme

- (i) Social disadvantages.
- (ii) Organizational behaviour with reference to entrepreneurial development.
- (iii) Identities and social tension.
- (iv) Community population and health.

2.27 Panel on Teacher Education: The Panel recommended that a workshop may be organised under the auspices of a university to discuss the various problems and issues of higher education such as structure, management, relevance, need for restructuring courses, community participation, extension etc. A small working group may be appointed to discuss and prepare a blue print for the workshop as also a working paper on the various themes.

The Panel endorsed the recommendations made at the 10th meeting of the Steering Committee of the National Council of Teacher Education regarding the need for providing adequate staff and other infrastructure facilities

* The seminar was held on July 3—5, 1984.

for the teacher training institutions. It was recommended that (a) development grants to teacher education institutions may be suitably enhanced in order to meet the growing requirements; (b) a scheme similar to COHSSIP may be introduced for teacher education colleges and atleast 10% of the colleges of education may be covered under this scheme. A sub-committee may work out the norms/criteria for selection of such colleges, keeping in view the parameters and the 40-point scale suggested for COHSSIP colleges.

The Panel noted that the backlog of untrained teachers in schools in most of the states has been cleared and therefore, there was no need for the universities to continue correspondence courses in education. If, however, a university still finds it necessary to institute such a course, it may be allowed to do so provided it fulfils the minimum requirements and norms such as adequate staff-student ratio, supervised practice teaching, library and laboratory facilities, home assignments, etc.

2.28 Panel on History: The Panel has suggested the organisation of regional workshops on undergraduate and postgraduate teaching and research in history and other supplementary measures for the improvement of standards of teaching, research and examinations. These are being examined for follow-up action.

2.29 Panel on Philosophy: The suggestion of the Panel for the organisation of national seminars for research scholars in the humanities and social sciences and also for exchange of visits of research scholars from one department to another for a short period is under active consideration.

2.30 Panel on Linguistics: The Panel has emphasised the need for the study of linguistics at the undergraduate level. It is only in a few centres that linguistics is taught at the undergraduate level and this makes it difficult to attract gifted students to the postgraduate programme in linguistics. The Panel further recommended that universities where postgraduate courses in linguistics are already in existence may seriously explore the possibility of introducing undergraduate courses in linguistics.

It was also of the view that aspects of linguistics be included in the programme of summer schools to be organised by the Commission for the holders of talent scholarships and trained linguistics be included in the faculty of summer schools specially in the field of literature, anthropology, sociology, communication engineering, psychology and education.

The Panel has also suggested that in summer schools proposed to be organized by the Commission for talented students, special lectures be arranged to orient students to language problems, needs and potentialities, especially in view of the language situation in the country and the need for effective national integration.

2.31 Panel on English and Foreign Languages: The Panel has proposed the organization of a national conference on syllabus reform in foreign languages covering languages that are taught at more than one centre and at more than one level of proficiency such as French, German, Modern Arabic, Modern Persian, Chinese, Japanese, Spanish and Russian. It was also decided that zonal conferences on the following subjects (i) Materials Production, (ii) Modernisation of Syllabi, (iii) Refresher/Orientation courses for in-service teachers, (iv) Applied Methodology, may be organised before the national conference on syllabi reform.

The Panel also recommend that a few fellowships on the pattern of teacher fellowships may be allocated in the field of foreign languages to identified university departments to enable them to attract teachers from other universities for doing M.Litt./M.Phil./Ph.D.

The Panel has also expressed the view that the Commission should support institutional programmes for handicapped and gifted students and provide assistance for additional staff, books, seminars/workshops etc. to enable university departments to take up programmes on special educational needs.

2.32 Panel on Classical Languages: The Panel has been considering specific measures for promoting the study on classical languages viz. Sanskrit, Pali, Prakrit, Arabic and Persian. It has agreed 'in principle' that universities should have composite departments of classical languages including Sanskrit, Prakrit and Pali. The Panel has also expressed the view that it would be desirable for the Darul Ulums to modernize their syllabi and restructure their courses. The Panel has also recommended that study of classical languages should be a pre-requisite for M.Phil. and Ph.D. wherever this is relevant and wherever such knowledge is required for consulting source materials.

2.33 Panel on Modern Indian Languages: The Panel on Modern Indian Languages has suggested that regional workshops be organized in the following languages: Assamese, Bengali, Oriya, Gujarati, Marathi, Punjabi, Urdu, Tamil, Telugu, Malayalam and Kannada.

A number of proposals in this regard have already been accepted by the Commission for implementation.

2.34 Panel on Art History: The Panel has emphasised the need for structural linkage between departments of art history in universities with agencies like research organisations, academies at national level and the Archaeological Survey of India. It has also suggested that a list of professors who retired during the last eight years from the departments of archaeology, music, musicology, art history and university museums be prepared. A detailed

note containing factual information regarding the status of various departments in art history as well as problems and prospects of art history in a broad long-term perspective is also being prepared.

2.35 Panel on Geography: Pilot studies have been undertaken for ecosystem mapping in the following areas:—

- (i) South Mirzapur plateau region with the bordering Ganges plain;
- (ii) Mahanadi delta and Chilka region;
- (iii) Rayalseema/Pulicat region;
- (iv) Lower Damodar basin;
- (v) Mahabaleshwar plateau;
- (vi) Part of Konkan coast, Godavari and Krishna deltas and Kaveri delta.

The Panel is undertaking some case studies for the investigation of existing standards, methods of geography teaching and basic facilities available in undergraduate colleges for effective implementation of revised syllabi prepared by universities.

To national-level workshops, one in the North and other in the South on "Regional Development and Planning" and in "Climatology and Geomorphology" respectively will be organised to help young teachers to formulate suitable research projects in these areas.

2.36 Panel on Geo-Sciences: The Panel has been collaborating with the Oil and Natural Gas Commission and the Geological Survey of India regarding field work/training facilities for geology teachers from universities. The Panel has suggested the organisation of special summer schools in the areas of:—

- (i) Geostatistics/Hydrology
- (ii) Physicochemical foundations of Geology
- (iii) Mineralogy/Petrology

Undergraduate and postgraduate curricula have been developed by the Panel and core courses in geophysics have also been modified.

2.37 Panel on Mathematics: A number of sample surveys and case studies have been undertaken to ascertain the present position in regard to existing variations in standards in universities and colleges in various regions as recommended by the Panel. The Panel suggested that, workshops and orientation courses on specific topics should be held for university and college teachers to enable them to handle modern syllabus.

Instructional conferences in Mathematics have been organized in the area of "Pure Mathematics" at the Kanpur for university/college teachers. Another instructional conference in "Applied Mathematics" is proposed to be held at the Bangalore University in 1984 winter as suggested by the Panel.

2.38 Panel on Statistics: A separate Panel on Statistics was set up by the Commission. The Panel is considering the steps to be taken for modernization of syllabi in statistics. The Panel recommended the introduction of courses in actuarial science, considering its needs and relevance. The Panel also recommended that steps may be taken for university-industry interaction in the area of statistics.

2.39 Panel on Chemistry: The Panel is in the process of updating the status report in Chemistry. A sub-committee has been constituted to suggest short courses in chemical education-chemical instrumentation, interaction between college and university teachers with distinguished scientists including foreign scientists. The Panel is also working on the guidelines for curricula, norms for laboratory and other facilities required for modernization of teaching of Chemistry at the undergraduate and postgraduate levels.

2.40 Panel on Bio-Sciences: On the recommendations of the Panel, workshops/study groups are proposed to be organized with a view to bringing together the principal investigators in specific areas and other experts in related areas. Application-oriented research in collaboration/consultation with the user agencies is being contemplated. Special summer schools/enrichment programmes are proposed to be organised for gifted students in appropriate locations with a view to exposing them to modern laboratory practices, project work and seminars through interaction with other scientists. The Panel has also suggested that an interdisciplinary research seminar be organised.

2.41 Panel on Physics: The Panel has recommended that an inter-disciplinary seminar on material science may be organised during the year 1984 at Kalpakkam for university and college teachers. The Panel has also recommended that a workshop of college teachers may be held to discuss the curriculum and infrastructure required for modernization of physics teaching at the undergraduate level. The Panel recommended that instructional conferences may be held in the areas of (i) "Surface Physics" and (ii) "Heavy Ion Physics".

2.42 Panel on Engineering/Technology: The Panel is undertaking a [benchmark survey of engineering colleges of universities on a regional basis with a view to ascertaining the position of facilities and assessing the requirement

of financial resources for upgrading facilities in the context of a modern curriculum in various engineering subjects. Problems such as orientation of teachers through refresher courses and workshop methods of teaching and evaluation and of linking education with industry and related matters are also receiving attention.

2.43 Electronics and Instrumentation: The Panel recommended that teacher orientation programmes be undertaken and seminars/workshops on various aspects of electronics be held at selected universities. Following seminars have been recommended to be held:

- (i) Utilization of synchrotron radiation for R&D in Electronics Materials at Poona University.
- (ii) Electronics in Instrumentation (scope of the seminar to be decided by an expert).
- (iii) Fibre Optics.

The Panel has also identified the following topics for instructional conferences in electronics and instrumentation:

- (i) Electronics Instrumentation
- (ii) Instructional aid in Electronics
- (iii) Opto Electronics
- (iv) Modern Electronics Materials
- (v) Computer Communication; and
- (vi) Micro Electronics and related Technology

The Panel worked out various courses for the teaching of Electronics in Science and Engineering streams and these suggestions are being implemented.

2.44 Education and Research in Electronics: During the last 40 years electronics has shown a phenomenal and extensive application of sophisticated electronics and resulted in great advances across a whole range of technologies. The Commission, keeping this in view as also the need for strengthening education and research in this field organised a workshop on education and research in electronics in October, 1982. It was recommended by the participants of the workshop that separate departments of electronics in some selected universities in different regions of the country should be established. It was also suggested in the workshop that modern syllabi for electronics for B.Sc. and M.Sc. stages may be developed.

The Commission in accordance with the above recommendations constituted a sub-committee of the Panel on Electronics and Instrumentation which included representatives from the Department of Electronics.

The Sub-Committee, *inter-alia*, recommended that separate Master's level courses in electronics be initiated in electronics science in Calcutta, Delhi and Poona Universities, and one-year post-B.Sc. Diploma course in Andhra, Cochin, Bangalore, Allahabad, Calcutta, Poona and Delhi Universities from 1984-85. The expenditure on starting these courses is to be shared by the UGC and the Department of Electronics. In order to meet the rising demand of manpower in electronics, the Panel has recommended that more universities/institutions be brought under the purview of the scheme in the near future.

2.45 Panel on Home Science: On the suggestion of the Panel, sub-committees for curriculum development in Home Science at the undergraduate and postgraduate levels were constituted. These sub-committees have finalized the curriculum for home science which has been approved by the Panel. The guidelines for curriculum at the undergraduate level are being printed. The curriculum for postgraduate level is under the active consideration of the sub-committees and the Panel.

An opinion survey is being conducted to decide the nomenclature of home science.

The Panel has also been advising the Commission on steps for the promotion of teaching and research in home science in universities and colleges.

2.46 Nuclear Science Centre: The Commission has decided to set up a Nuclear Science Centre in the university sector as a national facility. The Centre would provide facilities for advanced research to university as well as other scientists in the related areas of physics, chemistry, biology and medicine. The Centre will have a carefully planned, independent management structure and would be autonomous. A Project Steering Sub-Committee has been constituted for the Centre.

2.47 Cosmology and Relativity: On the recommendations of a National Committee constituted by the Commission on cosmology and relativity, four summer/winter institutes were organized in different regions of the country. These institutes have helped to expose the university teachers and research workers to recent developments in the field of relativity and cosmology.

2.48 Status Reports: With a view to assessing the present status of major disciplines in the sciences and the future needs of various departments, the Panels have been engaged in the preparation of status reports. The status report in statistics has been finalized and is under print. The status reports in chemistry, mathematics and engineering are being finalized. The status report on postgraduate courses in home science has been finalized and circulated to universities/colleges.

2.49 Environmental Sciences: The Commission, considering the importance of environmental education and the role of the university system in developing an adequate level of environmental awareness and training manpower in this newly emerging area of importance, constituted an expert committee in 1982 to advise on matters relating to development, teaching, research and extension work in environmental science in universities and colleges. The Committee has recommended that environmental sciences be introduced as an integral part of the existing courses. The Committee was also of the view that specialized programmes such as undergraduate/postgraduate diploma courses in environmental sciences be started with a view to obtaining trained manpower for teaching environmental sciences. A workshop is also proposed to be organized to consider these suggestions and also to prepare syllabi for environmental sciences to be introduced at the undergraduate/postgraduate level.

2.50 Research Support for Projects of National and Regional Relevance: The Commission intends to provide adequate institutional facilities in selected universities for participating in research and development activities relevant to economic development of the region. Modalities of cooperation between the universities, research agencies and industry for this purpose are being worked out.

2.51 Materials Research: With a view to developing materials research (electronics, metal, ceramic, high polymers etc.) on account of its wide application in industry, the Commission is proposing to establish national centres in some of the selected universities where already some infrastructure is available. It is envisaged that with the setting up of materials research laboratories at the national/regional levels in the university sector, the gap between academic research and industry would be bridged.

2.52 Laser and Fibre Optics Centres: In view of the wide range of applications of laser and fibre optics, the Commission has been assisting the universities to introduce laser and fibre optics as a regular course at the post-graduate level in selected universities. The Commission is of the view that intensive research in laser and fibre optics in the country needs to be further promoted. It is, therefore, intended to establish a few national/regional centres in identified universities where the basic infrastructure is available. An Expert Committee has been constituted for this programme which will help the Commission in identifying the universities for establishment of such centres and the areas of research to be covered by them.

2.53 Centres for Astrophysics and Astronomy: In view of the importance of these fields and the tradition of good work in this area in the country and also because front-line research in these fields is possible at reasonable cost

the Commission proposes to support certain universities to teach special courses in astrophysics/astronomy in their M.Sc. programme. Suitable observational facilities would be provided. A few active centres in astrophysics are, therefore, envisaged to be established during the Sixth Plan period.

With a view to developing teaching and research in astronomy, a Working Group for education and research in astronomy has been constituted. The Group advises the Commission regarding the steps to be taken in the national context for the development of teaching and research in astronomy. The Group is also advising the Commission on the development of the Rangapur Observatory of the Centre of Advanced Study in Astronomy at the Osmania University as a national facility for researches in the field.

2.54 National Centre for Science Information: Considering the fact that more than 20,000 scientists are working in the university system who are seekers of new information retrieval and dissemination of information in new areas of research has become a necessity. A Committee was constituted by the Commission to examine this matter. On the recommendations of the Committee and taking into consideration the existing infrastructure at the Indian Institute of Science, Bangalore, the Commission has agreed to the establishment of a UGC Centre for Science Information at the Institute. The Centre is visualized as a national facility in order to serve the needs of research scientists in all the universities.

2.55 Bio-Technology: The sub-group of Bio-Sciences Panel is in the process of finalising modules of bio-technology teaching and research. Detailed lecture notes (14 lectures) are being finalised as introduction to bio-technology at the undergraduate level. Postgraduate curriculum (including M.Phil.) is also being finalised alongwith the details of the inputs required. Training programmes for teachers in this area are also being finalised.

The UGC/National Bio-Technology Board Joint Committee has identified seven centres located in the universities to participate in collaborative research and manpower development. Proposals are under the active consideration of the Joint Committee.

2.56 Science Education Journals: The Commission accepted the suggestion made at the regional conferences in science education held in 1982 and sponsored the publication of a journal each for Mathematics, Chemistry, Physics and Biology education. The journals are to be devoted to higher education and help exchange of ideas concerning innovations in teaching and new curricula and products—software and hardware. These journals in addition to publishing articles on teaching, would also carry book reviews and selected theme articles from other science education journals in the world.

The first issue of the journals on Biology and on Physics have since been printed and circulated to universities and colleges. Other journals are under-print. The colleges in particular will receive all the four journals to help

improve teaching of science and they will be able to subscribe to the journals out of UGC assistance provided to them.

2.57 Hari Om Ashram Trust Awards: The Commission with the help of an endowment made by the Hari Om Ashram Trust, Nadiad has instituted the following awards of the value of Rs. 10,000 each to be awarded to outstanding scientists:

- (i) C.V. Raman Award for Experimental Research in Sciences.
- (ii) Homi J. Bhabha Award for Research in Applied Sciences.
- (iii) Meghnad Saha Award for Research in Theoretical Sciences.
- (iv) Jagdish Chandra Bose Award for Research in Life Sciences.

The awards for 1979 and 1980 have been announced. Nominations for 1981 and 1982 awards are under the consideration of the Commission.

Another award in the field of "Interaction between Science and Society" has also been revived from 1981 onwards. The nominations for this award for the years 1981, 1982 and 1983 are under consideration.

2.58 Panel on Mass Communication: The Panel on Mass Communication appointed a sub-committee for restructuring of the curriculum in mass communication at different levels of competence. The sub-committee recommended a two year masters course in mass communication which may comprise of five core-compulsory papers, optional groups, case studies/project report and sessional work. Keeping in view the dearth of relevant teaching materials suited to Indian conditions in an emerging area like communication, the sub-committee recommended that the Commission should support: (a) Orientation programmes for faculty improvement and (b) Development of teaching materials and aids. The sub-committee further suggested that the Commission should advise the universities to offer only those areas of specialization for which they have the necessary infra-structure, basic equipment and expertise. There should also be a specific provision for part-time faculty drawn from the various media agencies.

2.59 Mass Communication and Educational Technology Centres: It is a recognised fact that the main purpose of any effort at higher education level is to raise the quality and standard of teaching and learning in the universities and colleges. Introduction of mass communication and educational technology can play a vital role in increasing the professional competence, capability and communication skills of the teacher who is the pivot of the teaching-learning process. In the present context of non-formal education, educational technology will be a very useful tool in the programmes of adult and continuing education and extension and correspondence courses as also in the restructuring of courses of study at the university stage. In view of this, the

Commission gives importance to the introduction of mass communication and educational technology in the university system on a priority basis. Accordingly, during the Sixth Plan period, the Commission has made a provision of Rs. 200 lakhs for assisting the universities on a selective basis for mass communication and educational technology programmes.

On the understanding that with INSAT becoming operational, it would be possible to ensure transmission time of one hour everyday in the afternoon on programmes of higher education, the Commission constituted a Working Group to advise it on various matters connected with the setting up of centres of mass communication and educational technology in Indian universities. On the recommendations of the Working Group a Task Force was appointed in August 1982 to prepare a plan of action. The final recommendations of the Task Force/Working Group were considered and accepted by the Commission in July, 1983.

The satellite can be used with advantage for educational programmes among many other purposes. In principle, everyone desirous of receiving an educational programme can do so through community viewing. With this facility, the whole country can be unified by some common educational thrust and at the same time each region can be served according to its needs. There are exciting possibilities of class room situations, seminars or tutorial sessions to be beamed, vocational and technical courses requiring great deal of visuals to be conducted and programmes for teachers further education taken up without their having to leave their institutions. These programmes and facilities could form the core of a university of distance education which has been recommended to government from various forums.

The present position is that the college and university teachers who are to play a crucial role in producing suitable programmes have no acquaintance with the new T.V. or radio medium and in the university system there are very limited facilities available for doing so. Therefore, a small but carefully planned, beginning has to be made with provision for monitoring and evaluation so as to continuously expand and improve the programmes.

The Commission as an agency concerned with maintenance of quality and standards has taken the initiative in the matter and set up training and production facilities with standard equipment in six selected Centres, namely Mass Communication Research Centre, Jamia Millia Islamia, New Delhi, Educational Media Research Centres (EMRCs) at Poona University, Gujarat University and CIEFL, Hyderabad and Audio-Visual Research Centres (AVRs) at Osmania and Roorkee Universities. A Central Programme Committee has been set up to coordinate and channelize suitable material for daily telecast to Doordarshan. It has been decided to produce what are called enrichment programmes at the undergraduate level. Topics in different disciplines are being chosen so that the largest number of students, and indeed any educated person, may benefit. Some topics will relate to national development and national concerns such as agricultural or industrial

visions, achievements, shortcoming, future perspectives—or national integration, secularism and socialism which are a part of our Constitution. These subjects will receive scholarly attention and will help to give breadth of knowledge and awareness to the viewers. There will be special programmes for teachers in higher education to enable them to handle their class and examination work, to give them up to-date knowledge and particularly to make them familiar with educational goals of their profession. Some selected world-class educational TV Programmes are also being procured because of their excellence and in many cases the thrill of learning which distinguished makers of those programmes can bring to our student community.

Since the programmes to be produced by the university sector will only be in small numbers initially, it is desirable to select suitable material from that which is either commercially available or available on loan basis from universities or other institutions in India or abroad. For this purpose a Cell/Unit has been set up in Jamia Millia Islamia to examine the available videotapes audio-tapes and films for the purpose of determining their suitability for being televised through INSAT-IB.

In the long run, the Commission would like to have a proper idea about the audience profile, their entry behaviour and skills, their understanding of the English language, needs etc. The Commission would also like to pre-test the programmes which are being prepared. For this purpose, a Research Advisory Committee for INSAT Television Programmes for higher education has been set up.

The programmes will be telecast beginning from August 15, 1984.*

2.60 Promotion of Buddhist Studies: The Commission is providing assistance to three universities viz. Poona, Andhra and Saugar towards the promotion of Buddhist Studies. This assistance is provided for appointment of staff and purchase of books for strengthening teaching and research related to Buddhist Studies.

2.61 Promotion of Gandhian Studies: In view of the importance of Gandhian Studies in universities at the level of teaching and research as well as by way of extension activities, the Commission has been supporting the proposals from universities for the introduction of courses in Gandhian Thought and Values, strengthening of Gandhi Bhavans and starting of programmes by way of peace research and other related activities. At present, the Commission is providing assistance to the following universities towards the introduction of courses at various levels. (This is in addition to assistance provided for seminars/workshops, purchase of books and journals, appointment of staff, research fellows etc.):

*The telecasts were inaugurated on Independence Day (August 15, 1984)

Sl. No.	Name of the University	Courses offered
1.	Bhagalpur	M.A. in Gandhian Thought.
2.	Gujarat Vidyapith	(a) Two courses viz. 'Gandhiji's life and work' and Association of Gandhian Thought at the undergraduate level. (b) A postgraduate course linked with course in Indian Philosophy. (c) Correspondence course in Gandhian Thought at the postgraduate level.
3.	Jawaharlal Nehru	(a) Courses/Programmes on 'Gandhi and the World'. (b) Courses/Programmes on 'Gandhi and Sarvodaya'.
4.	Karnataka	Diploma in Gandhian Thought.
5.	Madurai Kamraj	(a) Part-time certificate and diploma courses. (b) M.Sc. courses in peace-making. (c) Correspondence course in Gandhian Studies at the M.A. level.
6.	Nagpur	Postgraduate Diploma.
7.	Punjab	(a) Postgraduate Diploma. (b) M.Phil. (c) Correspondence course at the post-graduate diploma level.
8.	Saugor	Gandhian Philosophy (in the department of philosophy—(A paper at the postgraduate level).
9.	Sri Venkateswara	(a) Diploma. (b) Two papers on Gandhian Ethics at the B.A. level. (c) Political Philosophy of Mahatma Gandhi at the M.A. level. (d) Philosophy of Gandhi as an optional paper at the M.A. level.

The Commission also has a Standing Committee on the Promotion of Gandhian Studies which advises it on specific measures to be taken in this regard. The Committee has appointed a sub-committee for preparing a status report on the present position of teaching and research in Gandhian Thought and Values and the functioning of Gandhi Bhavans, in different universities.

The Committee has also considered the criteria for assistance towards the strengthening of Gandhi Bhavans and recommended the following:-

- (i) Gandhi Bhavans should be headed by an honorary director who may be a distinguished professor interested in Gandhian studies. The Director may be suitably assisted by full-time/part-time supporting staff and for this purpose assistance within a ceiling of Rs. 30,000 p.a. for a period of five years may be granted. This may also include provision for the appointment of visiting professors.
- (ii) The Gandhi Bhavan should become a nerve-centre for programmes of a continuing nature, which may *inter-alia* include the following:
 - (a) Weekly lectures in the form of general courses on introduction to Gandhian Thought so as to create awareness about Gandhian Thought and Values.
 - (b) Community-oriented programmes in collaboration with agencies like N.S.S.
 - (c) Library, reading room and study corners for students, teachers and the community at large.
 - (d) Exhibitions/films on Mahatma Gandhi.
 - (e) Extra-mural course on Gandhi not linked to examination work; and
 - (f) Regular constructive work in and around the community.

2.62 Nehru Studies: The History of India of the last sixty years or so is inextricably bound up with the life story of Jawaharlal Nehru. There is a growing interest and recognition of the far reaching importance, nationally and internationally of 'Nehru Studies'. The idea is to re-examine the entire gamut of the Nehru legacy and see how his vision and thoughts are relevant today as ever before in the context of problems which we are facing at home and abroad.

The Commission on the recommendations of an expert committee constituted to consider proposals for promotion of Nehru Studies has agreed that the following programmes may be initiated:

- (i) A National Fellowship may be instituted every year for a senior scholar to undertake indepth studies on Nehru. The fellowship may be of the same type as under the UGC National Fellowship Programme.
- (ii) Research associates and junior fellowships may be awarded by the UGC directly to suitable scholars for undertaking pre-doctoral and post-doctoral studies on Nehru. The number could be decided by the Commission in the light of the response

- (iii) Special optional papers at M.A. level on Nehru may be introduced by universities in their courses on history and political science.
- (iv) Universities should be encouraged to organise seminars, symposia etc. on Nehru and his contributions.

Further action is being taken on the above decisions.

The question of introducing one or two papers on Nehru as part of courses in economics, political science, philosophy, sociology etc. is being examined with the help of an expert committee.

2.63 Centres of Advanced Study: In the vast and expansive situation prevailing in India involving a large number of universities and colleges, it is difficult to bring about improvement of standards without spreading the resources too thinly over a large area. The strategy has, therefore, to be one of concentrating on essential growth points in order that the selected centres of excellence may maintain the highest standards attainable in that field.

The scheme of Centres of Advanced Study was initiated in 1963-64. The scheme is intended to encourage pursuit of excellence and team work in study and research and to accelerate the realization of international standards in specific fields. With this object in view, substantial assistance is given to promising departments in the universities carefully selected on the basis of quality and extent of work already done, reputation and contribution to research as well as their potentialities for further development.

An important condition inherent in the very concept of 'Centre of Advanced Study' is that the centre should have an all-India character and be able to attract students and teachers from all over the country and help in promoting academic mobility. Another additional advantage that should accrue from the scheme is that the personnel trained at the centres would in course of time be available for strengthening the staff of other university departments—thus helping to meet to some extent the difficulties experienced by the universities in securing the services of competent teachers in specialized areas.

It was decided that assistance for these centres may be provided for a period of 10 years in the first instance and the question of further assistance be examined in each case on the basis of satisfactory progress and the assessment of work done by these departments.

The scheme of special assistance to selected departments was initiated in 1972. This is a supporting programme for centres of advanced study and basically its aim is to promote advanced study and group research effort, so that the identified department can strengthen research in one or two thrust areas and then on the basis of evaluation could be recognised as a centre of advanced study. The departments for special assistance are identified by the subject panels, keeping in view the ongoing research activities and their achievements. The recommendations of the panels are placed before the Standing Committee on Centres of Advanced Study/Departments of Special

Assistance which after screening recommends the departments for assistance. Thereafter, expert committees are constituted which examine the proposals in detail. The reports of the expert committees are considered by the Commission for a final decision.

A list of 29 Centres of Advanced Study/86 Departments of Special Assistance and 49 Departments for Research Support in the humanities, social sciences and science subjects is given in Appendices XIII-XVIII.

2.64 Major Research Projects (Humanities and Social Sciences): With a view to promoting research in humanities and social sciences, the Commission provides financial assistance to university and college teachers for research or learned work in their respective fields of specialization. Research on interdisciplinary basis particularly in areas which have remained relatively neglected but which are of crucial importance to the social and economic life of the country receive priority. Teachers may also send proposals in other areas depending upon their interest and aptitude. These proposals are also considered for financial support by the Commission.

The Commission approved 96 major research projects at a cost of Rs. 43.87 lakhs during the year* as given below:

Table 2.1

Subjects	Number of awards	Approved amount (in lakhs of Rs.)
Modern Indian Languages	19	7.48
English and Foreign Languages	1	0.30
Classical Languages	10	4.26
Linguistics	5	6.50
History	13	6.02
Art History	1	0.66
Philosophy	1	1.20
Economics	12	5.60
Political Science	8	3.39
Sociology	1	0.30
Anthropology	2	0.25
Psychology	2	0.80
Commerce	10	2.18
Education	8	2.65
Library and Information Science	1	1.00
Law	2	1.28
Total	96	43.87

*upto 15-6-1984.

2.65 Minor Research Projects in Humanities and Social Sciences: Under this scheme, financial assistance upto Rs. 10,000 is provided to a university or college teacher who wishes to undertake, along with teaching work, a short-term research project or an investigation for a doctoral degree under approved supervision. Assistance is available only for field work, preparation of questionnaire, computation work, equipment, books and journals which are specifically required for the proposed project but which are not normally available to the teacher in the institution where he is employed.

The Commission approved 372 minor research projects at a cost of Rs. 33.36 lakhs during the year* as indicated below:

Table 2.2

<i>Subject</i>	<i>Number of of awards</i>	<i>Amount approved (in lakhs of Rs.)</i>
Modern Indian Languages	81	6.81
English and Foreign Languages	28	1.11
Classical Languages	13	0.83
Linguistics	4	0.32
History	24	1.38
Art History and Museology	4	0.24
Philosophy	6	0.27
Economics	52	2.07
Political Science	32	1.82
Anthropology	3	0.17
Psychology	19	1.36
Commerce	68	5.35
Education	32	1.16
Social Work	6	0.47
 Total	 372	 33.36

2.66 Major Research Projects (Science)/Engineering and Technology: Assistance for science research is provided to faculty members in the universities and affiliated colleges for taking up well-defined research projects in pure and applied sciences. The research projects may relate to major programmes of research to be undertaken by the university departments as a whole in a selected field or to projects by small research groups as well as by individual teachers.

*upto 4-6-1984.

During the year, the Commission approved 245 major research projects at a cost of Rs. 204.91 lakhs in science, engineering and technology as detailed below:

Table 2.3

<i>Subject</i>	<i>Number of projects</i>	<i>Amount approved (in lakhs of Rs.)</i>
Physics	21	14.81
Chemistry	53	36.60
Bio-Science	108	97.61
Geology	12	6.84
Geography	12	5.38
Mathematics and Statistics	16	6.31
Home Science	1	0.28
Engineering and Technology	21	34.72
Electronics and Instrumentation	1	2.36
Total	245	204.91

2.67 Minor Research Projects (Science): The Commission has been providing assistance to individual teachers working in the universities and colleges for undertaking research in their specific fields. Support under this programme is specifically provided to college teachers and junior teachers in the universities who do not have adequate resources to meet the expenses connected with their individual research either for a degree or as part of their individual project. Assistance under this programme is limited to Rs. 10,000 for every selected teacher and is available for field work, computation, purchase of equipment apparatus, chemicals and books which are required for the project and are not normally available in the university/college where the teacher may be working at the time.

During the year, the Commission approved 1,223 projects at a cost of Rs. 75.43 lakhs in science, engineering and technology as detailed below:

Table 2.4

<i>Subject</i>	<i>Number of projects</i>	<i>Amount approved (in lakhs of Rs.)</i>
Physics	200	13.91
Chemistry	277	16.44

<i>Subject</i>	<i>Number of projects</i>	<i>Amount approved (lakhs of R)</i>
Mathematics	76	4.03
Botany	209	12.46
Zoology	273	15.50
Geography	32	0.86
Engineering and Technology	41	3.27
Geology	58	4.47
Medicine	16	1.35
Home Science	23	1.43
Pharmacy	18	1.81
 Total	1,223	75.43

2.68 Preparation of University Level Books by Indian Authors: In consultation with the Government of India (Ministry of Education and Culture) the Commission initiated in 1970-71, the scheme of providing financial assistance to outstanding academics in the universities, colleges and other institutions of higher learning and research in the country for preparation of high quality books, monographs and reference material for use in the universities and colleges.

During the year under report, the Commission accepted 75 free projects for preparation of university level books in various fields of science, humanities, social sciences, engineering and technology. During the same period, 29 manuscripts have been completed under this scheme. The progress of the scheme upto 31st March 1984 is as under:

(a) Projects initially accepted	... 77
(b) Projects cancelled due to non-implementation	... 82
(c) Projects where the manuscripts have been completed	... 230
(d) Projects in different stages of implementation	... 46

According to the information available, books relating to 57 projects have already been published.*

2.69 National Integration Programme: The Commission has been providing assistance to universities and colleges for organising national

*It may be mentioned in this connection that books under the scheme are published by the authors themselves, the assistance of the Commission being limited to the preparation of the manuscript.

integration programmes since 1981-82. This scheme has since been reviewed with the help of a committee. The committee felt that most of the proposals received from the universities and colleges were of a routine nature and indicated a general lack of awareness and enthusiasm in the educational institutions about the need for activising the work of national integration. The institutions generally repeated the items suggested in the Commission's letter inviting the proposals and had not proposed specific activities under national integration which may deal with specific problems relating to the region. The problems of integration vary from region to region and institutions should give thought to organise such programmes which may create an understanding of the necessity tolerance, accommodating and cooperation and a feeling of goodwill and unity amongst people and students belong to different regions, social and linguistic groups in their region.

The universities and colleges have, therefore, been asked to propose programmes dealing with specific problems, indicating a definite theme highlighting the most divisive tendency in that area. Universities'colleges may keep in view the following themes while sending their proposals:

- (i) Multi-lingual people living together.
- (ii) Getting to know the neighbours across the state.
- (iii) Projecting culture of one region to the other regions.
- (iv) Appreciation and study of tribal communities and customs around the country.
- (v) Unity in diversity.
- (vi) Processes of integration in time and space.

The media for organising relevant activities based on these themes could be in the form of plays including dance, drama, folk dance, exhibits, film shows, camps, mountaineering, trekking and other similar activities. One of the vehicles for carrying the message of national integration could be seminars in which national integration problems could be articulated and discussed in depth, each region choosing a divisive conflict which is most emotive in that area or region. At the human level the drama is the most effective vehicle for delivering that message. Such plays ensure the right mix of entertainment and instruction and help to expose the falsehood, the hypocrisy, the vested interest of the peddlers of disunity and division even more effectively than serious seminars and symposia.

Universities/colleges have, accordingly, been asked to select and highlight a definite problem related to national integration peculiar or special to their area.

2.70 Examination Reform: The Commission's programme of examination reforms is based on the report, "Examination Reform—A Plan of Action".

prepared by a Working Group constituted by the Union Ministry of Education. The report was endorsed by the UGC and thereafter discussed by the appropriate university bodies, so that each university could evolve its own plan of action. The Commission simultaneously sponsored a series of zonal workshops to involve the academic community representing different levels and shades of opinion.

The Commission has laid special emphasis on the implementation of certain specific measures leading to examination reforms with a view to improving the reliability, validity and objectivity of evaluation and with a view to bringing about a closer integration of teaching, learning and evaluation and to make examinations an educational experience. The main emphasis is on (i) continuous internal evaluation, (ii) development of question banks, (iii) introduction of grading system and (iv) introduction of semester system.

While the above measures have been suggested as a package plan, it was felt that continuous internal evaluation was the most crucial of these reforms. As pointed out by the University Education Commission as far back as in 1948-49: "The crippling effect of external examinations on the quality of work in higher education is so great that examination reform has become crucial to all progress, and has to go hand in hand with the improvement in teaching". Accordingly, the Commission appointed a study group to prepare the guidelines on continuous internal evaluation. These have been published and circulated to the universities with the suggestion that the same be placed before academic bodies and concrete steps be taken for the implementation of the various measures suggested in this document.

The Commission has constituted an Implementation Committee to advise it on various matters for implementing the examination reform programmes. Information collected from the universities/institutions deemed to be universities from time to time regarding their progress in implementing the programme of examination reforms is also reviewed by the Implementation Committee.

The Commission is also providing support to a few selected universities/institutions deemed to be universities towards core staff and other facilities such as, workshops, seminars, printing of question banks, purchase of books and equipment, contingencies etc. on 100% basis for establishment of Examination Reform Units within an over-all ceiling of Rs. 75,000 per annum besides actual expenditure on core staff. The grants paid to these universities/institutions have enabled them to introduce specific measures of examination reforms and to monitor the programme. At present the following 11 universities and 2 institutions deemed to be universities are receiving assistance from the Commission towards establishment of Examination Reform Units:

- (i) Madras University, Madras
- (ii) Mysore University, Mysore

- (iii) Poona University, Poona
- (iv) S.N.D.T. Women's University, Bombay
- (v) South Gujarat University, Surat
- (vi) Sardar Patel University, Vallabh Vidyanagar
- (vii) Jabalpur University, Jabalpur
- (viii) Jammu University, Jammu
- (ix) Kanpur University, Kanpur
- (x) Gorakhpur University, Gorakhpur
- (xi) Anna University, Madras
- (xii) Indian School of Mines, Dhanbad
- (xiii) Gandhigram Rural Institute, Gandhigram, Madurai District.

The proposals of the Jawaharlal Nehru Technological University, Hyderabad, Nagpur University, Patna University, Sri Sathya Sai Institute of Higher Learning and Dyal Bagh Educational Institute, Agra for assistance under this scheme are under consideration.

According to information available with the Commission, continuous internal evaluation at different levels has been introduced by 44 universities, 8 institutions deemed to be universities and 22 agricultural/technological universities. Question banks have been or are being developed in 19 universities and 2 agricultural universities. Grading system is in operation at 22 universities, 6 institutions deemed to be universities and 18 agricultural technological universities and the semester system in 47 universities. 7 institutions deemed to be universities and 15 agricultural/technological universities.

The Commission in December 1982 decided that all universities and institutions deemed to be universities should implement certain minimum examination reform programmes relating to syllabus/question paper and conduct of examinations. Accordingly, the universities were requested early in 1983 to take the following urgent measures:

(a) Syllabus/Question Paper

(i) The syllabus in each paper should be demarcated into well-defined units/areas of content along with a topic-wise break-down. The units may be numbered.

(ii) Examiners should be free to repeat questions set in previous examinations. This is necessary in order to ensure that students do not leave out important portions of the syllabus. Instructions to paper-setters should be amended accordingly.

(iii) There is often a very wide choice given to students for answering questions, say 5 out of 10. Such over-all choice restricts the area of knowledge with which a student can pass an examination and is, therefore, undesirable. If there is choice, it may be provided by alternate questions in each unit of the syllabus.

(iv) No examination should be held without fulfilling the requirement of a minimum number of lectures/tutorials/laboratory sessions etc. which should be clearly laid down by the university.

(b) Conduct of examinations

In order to enable university authorities to conduct examinations in a fair and impartial manner, the Commission would explore the possibility of the enactment of suitable legislation to make cheating in examinations a cognizable offence and to provide the necessary administrative support to check malpractices. In the meantime, universities must take all steps for the proper conduct of examination such as effective security measures, proper supervision and invigilation, cordoning off the examination centres from the range of loudspeakers and other interference, flying squads and stern action in all cases involving copying and use of unfair means.

78 universities/institutions (65 universities, seven institutions deemed to be universities and six institutions of national importance) have responded favourably to the minimum examination reform programme of the Commission and agreed to implement the same.

2.71 Revised Guidelines for Introduction of M.Phil. Courses: The Commission in April 1983 reviewed the conditions for M.Phil. programme and revised the guidelines accordingly. It has been stated that the M.Phil. degree should be looked upon as the first research degree whose components will be course work as well as research work. It would provide facilities for undertaking research. Training should also be provided in research methodology. It is visualized that the M.Phil. degree will provide an opportunity to candidates to proceed to the second research degree, viz. Ph.D., it being understood that the research work done for M.Phil. degree could be incorporated for the research work for Ph.D. degree. Normally those will be permitted to proceed for the second research degree (Ph.D.) who have obtained an M.Phil. degree. However, in case of students who have either given satisfactory evidence of having attained equivalent level of proficiency or have done their Master's degree with a dissertation may also be permitted to proceed directly for Ph.D.

The duration of M.Phil. course should be generally two semester (one academic year) in case of full-time students and three semesters in case of part-time students with permission to complete the dissertation subsequently as a regular/part-time candidate or as an ex-student within the maximum period of four semesters for full-time students and five semesters for part time students.

The Commission has also spelt out the contents of the programme, admission requirements, methods of evaluation, academic staff, organization and administration of the programme.

2.72 Special Programmes for Improvement of Standards: With a view to promoting research and raise standards in sciences, humanities and social sciences, the Commission has taken a number of important measures such as the provision of support to 100 scholars in sciences and 200 scholars in the humanities and social sciences for graduate and Master's courses. The Commission has also approved the proposal for setting up atleast two information centres, one in humanities and the other in social sciences on the pattern of the Science Information Centre at the Indian Institute of Science, Bangalore. These centres will have the facility for documentation and abstracting articles published in journals etc. and for supplying such material to research scholars/teachers of various universities. The location of these centres will be decided in due course.

The Commission has also approved the rules and procedures formulated for providing support for the publication of journals in humanities and social sciences and desired that such support should be provided on a selective basis so as to strengthen some of the existing journals or start now ones of a high standard.

2.73 Ph.D. Theses: The Commission in July, 1983 accepted the recommendations made by the conveners of science panels that the abstract of the Ph.D. theses, of about 10 pages, should be mandatory whenever a thesis is submitted in any subject. Printed or cyclosytled copies should be circulated to all universities (concerned departments), the UGC and other funding agencies. This would enable better co-ordination of reserach effort in different universities. It has also been agreed to that the expenditure on printing or cyclostyling of theses and postage may be met out of University Grants Commission/Council of Scientific and Industrial Research contingency grants of individual fellows. The reamaining amount, if any, may be met out of publication grants placed at the disposal of universities by the Commission.

SECTION 3

Development of Universities

3.01 As stated in earlier UGC reports, the Commission has been providing developmental assistance to universities in accordance with the objectives and general framework laid down in two important documents viz. the 'Policy Frame' and 'Approach to Development of Higher Education'. The main emphasis in the current plan is on (a) improvement of standards; (b) equality of opportunity; (c) restructuring of courses for practical orientation and greater relevance; and (d) extension as an integral part of education. Low priority has been given to the expansion of educational facilities by way of support for the establishment of new universities, centres for postgraduate studies, new departments and to construction/extension of buildings involving 'brick and mortar'. The emphasis is on those teaching and research programmes which are likely to make a significant contribution to national development effort and planning.

3.02 The specific allocations to universities have been made on the basis of the recommendations of Visiting Committees, which assessed the needs and requirements of the universities for a five-year period. These took into consideration (a) guidelines to the universities for the preparation of proposals, (b) guidelines for the visiting committees, (c) items of developmental assistance and (d) basis of assistance, as spelt out in the UGC Annual Reports for 1980-81, 1981-82 and 1982-83.

Assessment of 78 universities was completed with the help of visiting committees as on 31st March, 1984. Apart from suggesting financial allocations to the universities, the committees have also made recommendations on the improvement of standards of teaching and research.

3.03 The Commission is also preparing the approach paper for the Seventh plan with the help of experts and in the light of comments and suggestions received from the conveners of Sixth plan visiting committees. In general, the following objectives have been kept in view:

- (i) To create research and other centralized facilities at selected centres for the benefit of a group of institutions in the region, country;
- (ii) to encourage academic mobility and cross fertilization of ideas with a view to inculcating the feeling of national integration by providing special assistance for faculty housing/complex and hostels;
- (iii) to re-structure courses at first degree level so that they become relevant to the local needs and environment and increase the area of employability of graduates,

- (iv) to give priority to programmes intended to achieve the national objectives;
- (v) to develop centres of excellence;
- (vi) to give equal opportunities, specially to those living in backward areas and belonging to weaker sections of the society including women and handicapped students; and
- (vii) to make optimum use of the existing facilities in the universities' colleges specially physical facilities.

3.04 Period of Assistance to Universities and Colleges for the posts created/ filled during Sixth Plan with approval of the Commission: The Commission in March, 1983 agreed that assistance to universities for the post created/ filled during the Sixth plan with the approval of the Commission may be provided by it till the end of 1987-88 on condition that universities/state governments would take over the recurring liability thereafter. Further, while calculating the estimated cost of schemes to be accepted, the provision for such posts would be made only upto 31st March, 1985 within the overall ceiling indicated to the universities. It was also agreed that the expenditure beyond March 31, 1985 on these posts would be a first charge on the Seventh Plan allocation.

It has been decided that assistance for academic and other posts (technical staff including professional staff for library) approved under development schemes in colleges during the Sixth plan may be provided upto 31st March, 1988 on condition that the colleges give an undertaking that the posts created on a permanent basis will be maintained by them after the Commission's assistance ceases.

3.05 Additional Allocations for the Improvement of Undergraduate Education: The Commission in July, 1983 agreed to an additional allocation during the Sixth Plan period, as indicated below, in respect of universities which have both postgraduate and undergraduate teaching in the university departments/ conducted colleges.

<i>Universities</i>	<i>Suggested additional allocation for improvement of undergraduate education (in lakhs of Rs.)</i>
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1

2

- (i) M.S. University of Baroda (university and conducted colleges)

30

(ii) Allahabad University	25
(iii) Gorakhpur University	25
(iv) Lucknow University	15
(v) Saugar University	10
(vi) Jodhpur University	20
(vii) Udaipur University	7
(viii) S.N.D.T. Women's University (for conducted colleges)	30
(ix) Kashi Vidyapith (Arts only)	5
	167

3.06 Grants for on-going Programmes: The following table regarding the payment of grants to the central and state universities for humanities, science, engineering and technology and miscellaneous schemes shows that there was an increase in expenditure during 1983-84 under all heads.

Table 3.1

(Rupees in lakhs)

Plan projects	1979-80	1980-81	1981-82	1982-83	1983-84
(i) Grants to Central and State Universities for Humanities	413.84	417.75	568.76	439.24	841.91
	1.00*	5.35‡	4.31‡	0.87*	1.07*
(ii) Grants to Central and State Universities for Science	863.85	906.05	1,186.81	913.07	2,836.53
	11.47*	18.56*	8.04*	5.09*	3.44*
(iii) Grants to Central and State Universities for Engineering (including engineering colleges)	397.43	348.90	745.02	517.32	574.77
	12.10*	0.25*	10.21*	3.00*	
(iv) Grants to Central and State Universities for miscellaneous schemes*	775.84	1,031.02	961.91	1,152.75	1,361.38
	12.51*	12.43*	7.85*	5.66*	3.03*
(v) Miscellaneous** expenditure	41.01	45.65	67.89	64.90	79.11
Total	2,491.97	2,749.37	3,530.39	3,087.28	5,693.70
	37.08*	36.59*	30.41*	14.62*	7.54*

A statement of total development grants disbursed by the UGC to each university (state-wise) is given in Appendix XIX.

*By adjustment.

**This category includes several important programmes common to both universities and colleges such as examination reforms, restructuring of courses, correspondence courses, adult and continuing education, faculty awards, teacher fellowships, college science improvement programme and college humanities and social sciences improvement programmes, grants to central universities for campus development, unassigned grants, student welfare programmes, guest houses, establishment of chairs etc.

3.07 Campus Development in Central Universities and Institutions deemed to be Universities: The committee of Vice-Chancellors of the Central Universities in October, 1983, pointed out the need to work out a pattern of assistance for campus development grant to Central Universities, taking into account the size and character of the universities. Accordingly, a committee has been constituted for the purpose. The committee will also look into the campus development needs of institutions deemed to be universities.

3.08 The Commission continued to provide grants under plan expenditure to the Banaras Hindu University, Aligarh Muslim University and Delhi University for medical education. The following grants were paid in 1983-84:

Table 3.2

(*Rupees in lakhs*)

<i>Name of the University</i>	<i>Medical Colleges</i>	<i>Hospitals</i>
Aligarh Muslim University	13.90	33.00
Banaras Hindu University	3.10	
Delhi University College of Medical Sciences ⁺	29.50	

The maintenance expenditure of the medical colleges at the Aligarh Muslim University and the Banaras Hindu University and the attached hospitals was met out of block grant of the universities.

The Commission also continued to pay grants to the central universities and institutions deemed to be universities for their campus development under plan. During 1983-84, a grant of Rs. 27.82 lakhs was sanctioned for the purpose.

3.09 The following grants were paid to the universities and institutions deemed to be universities during 1979-80, 1980-81, 1981-82, 1982-83 and 1983-84:

Table 3.3

(*Rupees in lakhs*)

<i>Purpose</i>	1979-80	1980-81	1981-82	1982-83	1983-84
*Science Departments	875.32	924.61	1,194.85	918.16	2,839.97
*Humanities & Social Sciences	414.84	423.10	573.07	440.11	842.98
*Engineering & Technology	409.53	349.15	755.23	520.32	574.77
*Miscellaneous Schemes	788.35	1,043.45	969.76	1,158.41	1,364.41

*Figures include payments made by adjustment

Table 3.4

Grants* for the Development of Science

(Rupees in lakhs)

Sl No	Item of Expenditure	1979-80					1980-81					1981-82					1982-83					1983-84					Total expendi- ture 1979-80	%
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24			
1. Staff		55.56	8	208.24	31	136.71	15	64.09	11	35.99	2	500.59	10															
2. Equipment		366.68	52	116.47	17	483.24	52	232.21	39	894.16	46	2,092.96	44															
3. Books and Journals		116.20	16	69.68	10	101.30	12	75.38	13	354.74	18	725.30	15															
4. Buildings		76.00	11	115.63	17	51.30	6	58.18	10	51.98	3	153.09	7															
5. Centres of Advanced Study**		28.36	4	94.34	14	18.95	4	63.29	10	24.96	1	249.90	5															
6. Special Assistance to Selected Departments		53.48	7	64.40	9	91.78	10	93.10	16	590.34	30	895.30	18															
7. Other Schemes		14.24	2	11.56	2	9.12	1	8.82	1	11.76	—	55.50	1															
Total		710.52	100	680.32	100	922.40	100	595.27	100	1,964.17	100	4,872.64	100															

*Including payments made by adjustment.

**Including staff, buildings, books, equipment etc

Table 3.5

Grants for the Development of Humanities and Social Sciences

(Rupees in lakhs)

Sl. No.	Item of Expenditure	1979-80					1980-81					1981-82					1982-83					1983-84					Total Expenditure 1979-80	% to 1983-84
		Rs.	%	Rs.	%	Rs.	%	Rs.	%	Rs.	%	Rs.	%	Rs.	%	Rs.	%	Rs.	%	Rs.	%	Rs.	%	Rs.	%	Rs.	%	
1. Staff		97.90	25	186.13	47	183.83	35	89.25	22	45.31	6	402.43	24															
2. Equipment		32.82	8	19.95	5	26.77	5	13.69	4	200.44	25	293.67	12															
3. Buildings		51.00	13	25.62	7	35.62	7	42.93	11	35.03	4	190.20	8															
4. Books and Journals		142.98	36	91.11	23	161.51	30	129.06	32	404.91	51	928.67	37															
5. Centres of Advanced Study		19.07	5	19.66	5	15.88	3	22.89	6	29.46	4	106.96	4															
6. Special Assistance to Selected Departments		20.88	5	31.24	8	61.28	12	54.95	14	47.25	6	215.60	9															
7. Area Studies		13.87	4	12.45	1	17.25	3	24.17	6	5.16	7	72.85	3															
8. Other Schemes		15.09	4	8.76	2	25.26	5	21.06	5	20.45	3	90.62	3															
Total		393.61	100	794.92	100	527.40	100	397.95	100	787.11	100	2,500.99	100															

*Includes staff, buildings, books, equipment etc.

3.10 Grants for the Development of Science: The assistance given to the universities for science education and research during 1979-80, 1980-81, 1981-82, 1982-83 and 1983-84 is indicated in Table 3.4.

3.11 Grants for the Development of Humanities and Social Sciences: Grants paid to the universities during the years 1979-80, 1981-82, 1982-83 and 1983-84 for the development of humanities and social sciences are indicated in Table 3.5.

3.12 Developing expertise in Archaeology: On the recommendation of the Committee for the development of expertise in archaeology, the Commission has agreed that assistance may be provided to the following universities for a period of five years for strengthening their activities in the field of archaeology:

- (i) Aligarh Muslim University
- (ii) Banaras Hindu University
- (iii) Kurukshetra University
- (iv) Calcutta University
- (v) Patna University
- (vi) M.S. University of Baroda
- (vii) Poona University
- (viii) Madras University

Assistance is to be provided on 100% basis, outside the plan allocation of the universities on the usual terms and conditions. The posts in the case of state universities under the scheme are to be taken over by the state government concerned as committed expenditure when the assistance from the Commission ceases at the end of 1987-88.

3.13 Teaching and Research in Museology: The Commission has agreed to provide assistance for teaching and research in museology on a selective basis. This has been done on the recommendation of the Art History Panel which had constituted a sub-committee to examine this question. The sub-committee had expressed the view that the Commission should encourage and provide funds for the establishment of museums in the universities on a selective basis in the field of humanities, art, natural sciences and technology etc. The pattern of assistance would be the same as under the Sixth plan development schemes.

3.14 Committee on Performing Arts: The Commission has constituted a committee on Performing Arts. This committee has identified priority areas of research in the field of performing arts. The committee has also recommended that workshops and seminars may be organised on topics like:

- (i) Teaching Methodology in Performing Arts;
- (ii) Use of Folk Songs Media for teaching; and
- (iii) Seminars on Curricula Development in Performing Arts.

The Performing Arts Committee has also recommended that interaction of the departments of performing arts with other departments in the universities such as Mathematics and Sanskrit may be encouraged. A status report on the present position of performing arts (viz. music, dance and drama) in the universities is under preparation.

3.15 Development of Area Studies: The Commission continued to provide assistance to identified universities for the development of area studies. The main purpose of this programme is:

- (i) to train a body of scholars for specialised studies on problems and culture of a particular country or group of countries
- (ii) to develop inter-disciplinary research, and
- (iii) to develop teaching of social sciences and related disciplines introducing a comparative inter-disciplinary dimension.

The assessment of 15 centres of Area Studies in the universities has been completed with the help of expert committees and grants and other facilities, allocated for the development of these centres for the five-year period beginning 1983-84 to 12 centres. The proposals of the remaining centres are under consideration.

The period of utilization of the Ford Foundation assistance of \$3 lakhs provided to the Commission came to an end towards the close of September, 1983 by which time almost the entire allocation had been utilized for the development of area studies in universities. Ford foundation assistance has been mainly utilized for the purchase of books and journals by the centres and for providing maintenance grant to scholars for their field work abroad. This assistance has also been utilized for providing the services of a teacher in Chinese language and literature to Delhi University.

3.16 Development of Studies in the History of Science and Technology in the Universities: The Commission has been providing assistance towards the appointment of one reader/lecturer in the universities of Poona, Aligarh, Banaras Hindu University and Calicut towards the introduction of a course in the history of science and technology at the postgraduate level in the department of ancient Indian history, culture and archaeology. Assistance was provided on cent per cent basis upto the end of March 31, 1981. It has since been decided to provide assistance to the above universities upto the end of 1984-85 for the course in the history of science and technology.

SL	No	Item of Expenditure	1979-80 %	1980-81 %	1981-82 %	1982-83 %	1983-84 %	Total %						
1	1	Expenditure	147.84	147.84	147.84	147.84	147.84	147.84						
2	1	Staff and Materials	22.29	8	169.88	60	192.74	25	126.69	37	91.31	19	542.85	94
3	1	Books and Journals	26.51	10	18.89	6	18.07	10	18.66	9	17.15	10	205.94	11
4	1	Buildings	41.22	16	62.30	22	44.51	1	66.24	19	73.72	16	288.01	15
5	1	Miscellaneous Services	2.68	1	2.95	1	2.94	1	2.87	1	1.38	1	13.86	1
6	1	Total	324.16	100	324.16	100	307.99	100	345.70	100	388.21	100		

Table 36
Details for the Development of Teaching and Training

3.17 Strengthening/Establishment of Archival Cells: The Commission has agreed to provide assistance to the universities for strengthening/establishment of archival cells. Under this scheme, the Commission is providing assistance to 22 universities. Financial assistance under this scheme is being provided for staff, essential chemicals and equipment. The universities are expected to set up archival cells for the preservation of their educational records and other important papers of literary and scientific value. While accepting the proposal for establishment of archival cells, the Commission has also decided that proposals for instituting a diploma course in archival studies may also be invited from the universities. The proposal of the Jamia Millia Islamia for a one year diploma course in archival science is under the consideration of the Commission.

3.18 Development of Engineering and Technology: The Commission provides financial assistance to university maintained institutions in engineering and technology for the development of higher education and research. At present 32 such institutions are covered under the scheme. Besides offering facilities for undergraduate education, these institutions conduct a large number of postgraduate courses in various branches of engineering and technology. Some of these institutions are also involved in fundamental and applied research at higher level for the advancement of technology.

An allocation of Rs. 2,775 lakhs was made available to the Commission for the development of engineering and technological education during the Sixth plan period. This included the provision for increase in the value of postgraduate scholarships/senior research fellowships, being paid to post-graduate students of engineering and technology from Rs. 400 p.m. to Rs. 600 p.m. and for Ph.D. from Rs. 500 p.m. to Rs. 700 p.m. with effect from 1-11-1980. There is an approved intake of 1,579 students for approved postgraduate courses in engineering and technology.

During the year under report, the Commission approved a postgraduate course in instrument technology at the Anna University, Madras.

3.19 During 1983-84, the Commission released grants to the universities for the development of engineering and technology and management studies, as indicated in Table 3.6.

3.20 Unesco Coupons: The Commission continued to provide Unesco coupons to universities for the import of books and replacements/spares for scientific equipment. For major items, universities are making use of the policy laid down under open general licence.

3.21 Management Studies: The Commission continued to provide financial assistance to 23 universities/institutions for conducting M.B.A. courses. An amount of Rs. 5,90,000 was paid during 1983-84.

3.22 Development of Computer Facilities and Computer Education for Man-power Training: In the present age, computers are considered an essential aid for research work. The Commission, in consultation with the Electronics Commission, agreed to provide medium sized computers in selected universities. These universities were advised to make adequate preparation for the installation of the computers, and to appoint necessary technical staff and get them trained from the suppliers of the computer system. Other universities, which are, in need of computer assistance are provided financial assistance for buying computer time from nearby computer centres.

The Computer Development Committee has so far recommended installation of computer systems at 36 universities. Their recommendations have been accepted by the Commission. 30 computer systems have already been installed and are fully functional. A statement showing the present position of computer facilities in universities is in Appendix XX.

The Computer Development Committee had earlier recommended the establishment of computer centres at six universities with level 'O' system (Burdwan, North Bengal, S.N.D.T. Women's University, Calicut, Berhampur and Himachal Pradesh) and 7 universities with level I system (Allahabad, North-Eastern Hill University, Shillong, Bangalore, Hyderabad, Rajasthan, Cochin and Kashmir). Jawaharlal Nehru Technological University, Hyderabad has also been allowed the installation of level I system. The proposals of seven universities for replacement of their existing computer systems have also been examined by expert committees appointed for the purpose. These universities are: Andhra, Delhi, Madras, Sardar Patel, Gujarat, Osmania and Jawaharlal Nehru. The recommendations made by the committees have been accepted by the Commission and approval for replacement of computers conveyed to the concerned universities. The Commission has also provided assistance to five universities for up-gradation of their existing TDC systems.

With the installation of computers, the need for computer manpower training was felt urgently. Hence the Commission has agreed to initiate B.Tech, M.Tech, MCA programmes in computer science and technology in a phased manner. One-year post-degree diploma in computer science and application has been introduced in 28 selected universities in a phased manner starting from 1982-83.

3.23 Administrative Sub-Centres: The Commission has been considering the question of setting up administrative sub-centres for purposes of decentralization of administrative responsibilities in situations where individual universities have a large number of colleges spread over the university's jurisdiction. Such sub-centres, it is visualized, would be directly responsible for all work connected with affiliation, inspection, conduct of examination and possibly declaration of results as well as coordination of various development programmes for the colleges. A committee was appointed to prepare

suitable guidelines as well as the basis of assistance for the purpose. The recommendations of the committee are under active consideration.

3.24 Nandlal Bose Memorial Lectures: The Commission in March, 1983 agreed to institute Nandlal Bose Memorial Lectures in central universities annually by rotation on lines similar to Dr. Zakir Hussain Memorial Lectures out of the interest accrued on the endowment fund of Rs. one lakh placed at the disposal of the UGC by the Government of India, Ministry of Education and Culture, under this scheme. Assistance is provided to the extent of Rs. 10,000 to the selected university towards meeting the honorarium @ Rs. 5,000 payable to the scholar delivering the lecture and the remaining Rs. 5,000 for meeting his travel expenses and the cost of the publication of lectures. The first Nandlal Bose memorial lectures were delivered by Sri Krishna Kripalani at the Delhi University on 27th January, 1984.

3.25 Revised guidelines for Unassigned grant for 1983-84 onwards: According to the revised guidelines for unassigned grant—1983-84 onwards, teachers working in the university teaching departments as on 15th August, 1982 would only be taken into account for determining the quantum of assistance under "Unassigned grant" during 1983-84. Teachers working in colleges and institutions would not be taken into account.

The amount of "Unassigned grant" for 1983-84 would be determined on the following basis:

- (a) Rs. 30,000 for university having upto 100 teachers.
- (b) Rs. 45,000 for a university having between 101 and 200 teachers.
- (c) Allocation for a university having 201 teachers and above would be determined on the basis of Rs. 150 per teacher and Rs. 50 per full-time research scholar in the university departments subject to a maximum of Rs. 2.25 lakhs.

3.26 Expenditure on providing assistance to teachers/technicians for participation in international conferences held abroad should not be less than 40% and should not exceed 60% of the unassigned grant allocated for the year 1983-84. If in a particular year an university does not utilize at least 40% of the unassigned grant on this account, the amount falling short of 40% will have to be refunded to the UGC. It has also been pointed out that adequate emphasis be also given on implementation of other schemes viz. travel grants to teachers/scholars/technicians for attending academic conferences and visiting centres within India and exchange of teachers.

3.27 University Science Instrumentation Centres (USICs) and Regional Instrumentation Centres (RICs): The programme was initiated during the year 1976 with the main objective of assisting universities to maintain and

repair equipment and also to pool together costly sophisticated instruments so that the various science departments could use them as a common facility. The objectives of the scheme are (a) to repair and service instruments; (b) to design and fabricate attachment for or modifications to the existing equipment; (c) to train instrument scientists and technicians; (d) to develop instrument R & D and (e) to provide analytical services by pooling together major equipment in the different departments under the common instrumentation centre. The Commission has so far approved proposals of 56 universities for setting up the University Service Instrumentation Centres.

The Commission has also agreed to provide assistance to the Regional Instrumentation Centre, Indian Institute of Science, Bangalore and Western Regional Instrumentation Centre, Bombay University. Regional Centres for the Eastern and Northern Regions are yet to be identified. The Regional Instrumentation Centre would monitor the functioning of USICs, train resource personnel, provide service and maintenance facilities, design and develop new teaching aids etc.

SECTION 4

Development of Colleges

4.01 The system of affiliated colleges, which is peculiar to India in many ways, has a crucial role to play in the university system with particular reference to the maintenance and coordination of standards. A bulk of the student population in the country, particularly at the first degree level, is enrolled in the colleges and there is also a fair proportion of teachers working in the colleges. These colleges cater to 86.4 per cent of the total enrolment of students at the undergraduate level, 58.8 per cent at the postgraduate level and 14.1 per cent at the research level. Teachers employed in colleges constituted 77.9 per cent of the total number of teachers in the universities and colleges during 1983-84.

4.02 Although the Commission attaches high priority to the development of colleges, the resources available for the purpose are woefully limited, keeping in view the large number of colleges that are already in existence and the scale of support required by them. The Commission has held that postgraduate education should be conducted at university centres and undergraduate colleges should not be set up without coordinated consideration of the need for higher education in a state. However, the number of colleges keeps swelling at an alarming pace and a good proportion of them are not assured adequate financial support.

4.03 In view of the constraint of resources, the Commission had no option but to adopt a policy of concentrating on essential growth points through programmes such as COSIP, COHSSIP and restructuring of courses, so that there may be the necessary degree of modernization and diversification of courses and an appreciable impact on standards. Concomitantly, the Commission is discouraging the establishment of non-viable colleges with low enrolment and inadequate facilities. Only in exceptional cases could a new college be set up and that too in an educationally backward area where facilities for higher education do not exist.

4.04 The Commission's assistance for the development of colleges includes basic grants for books, equipment and faculty development and the strengthening of undergraduate and postgraduate instruction and infrastructural facilities on the basis of guidelines formulated for the purpose. Special consideration is given for intensive development of colleges located in educationally backward areas, in rural areas, or those catering to the needs of Scheduled caste/Scheduled tribe students and women's colleges.

4.05 The Commission's policy, therefore, for development of undergraduate and postgraduate education in colleges during the Sixth plan period has two

main aims (a) improvement of standards and quality of education and (b) removal of disparities and regional imbalances in higher education facilities.

4.06 The pattern, sharing basis and ceiling of assistance for (a) basic grants, (b) development of undergraduate education,* (c) development of postgraduate education in colleges and the basis on which special consideration is given for intensive development of colleges situated in educationally backward areas and colleges catering the needs of Scheduled caste/Scheduled tribe students are given in the UGC Annual Report 1981-82 (pp. 43-45). The report also gives the basis of assistance to single faculty colleges in professional subjects (para 4.07, p. 46). The changes made during the year are indicated below.

4.07 Colleges located in Backward Areas: The Commission in April, 1983 considered the question of defining the term 'Backward areas' for purposes of developmental assistance to colleges in the Sixth plan period and agreed that, keeping in view the wide range of students per thousand of population in the relevant age group enrolled in higher education, the districts in each state where enrolment is 50% or less than the average obtaining in that state may be considered as educationally backward. A list of such educationally backward districts for purposes of identifying colleges located in backward areas for development assistance during the Sixth plan period as accepted by the Commission has since been prepared and the colleges informed accordingly.

4.08 Revised guidelines for assistance to Arts, Science, Commerce and Multi-faculty colleges for the development of undergraduate education. The Commission in June, 1983 reviewed the guidelines for providing assistance to arts, science, commerce and multi-faculty colleges for the development of undergraduate education during the sixth plan period and agreed that in the light of the experience of processing proposals received from colleges, the

*The Commission has since agreed that in the light of the experience of consideration of the proposals from colleges for their development programmes, the eligibility condition relating to the overall student-teacher ratio may not be insisted upon for the present. The Commission has further agreed that in the case of colleges which have an enrolment exceeding 2,000 students (excluding law) in degree classes and above as on 1st August, 1981 in the academic session 1981-82, the ceiling of assistance may be raised to Rs. 7.5 lakhs in the Sixth plan period.

It has also been decided that in the light of experience so far, the guidelines laid down for purposes of assistance to colleges in the Fifth and Sixth plan period may be reviewed with the help of a committee. This committee may also suggest suitable guidelines for assistance to colleges in the Seventh plan period, indicating also the nature and pattern of assistance that may be provided for the development of colleges.

eligibility condition relating to the overall student-teacher ratio may not be insisted upon for the present.

The Commission further agreed that in case of colleges which have enrolment exceeding 2,000 students (excluding law colleges) in degree classes and above as on 15th August, 1981, the ceiling of assistance may be raised to Rs. 7.5 lakhs.

4.09 Assistance for Development of Postgraduate Education: According to the existing guidelines laid down by the Commission for assistance for development of postgraduate education in colleges, the colleges which have postgraduate departments in arts/science/commerce and which fulfil the following norms are considered for assistance for development of post-graduate education, in the department concerned:

- (i) An arts department having at least four teachers with M.Phil. or equivalent degree/research work, of whom at least two teachers have Ph.D. or equivalent research work (b) a science department having at least six teachers with M.Phil. or equivalent degree or research work of whom at least two hold Ph.D. degree or equivalent research publications.
- (ii) The department subscribes to at least six standard journals in the subject.
- (iii) The department has at least one research project undertaken by faculty members.
- (iv) The minimum strength of full-time students in two years post-graduate course is twenty.

The consideration of the proposals received from the colleges, however, revealed that if all the above norms were to be applied very few postgraduate departments and colleges would, in fact, be considered for assistance. At the same time, it is to be recognised that the colleges have a major responsibility for postgraduate education and if no assistance is given to improve their facilities, standards would suffer.

In view of the above considerations, the norms laid down for assistance for development of postgraduate education in colleges in the Sixth plan have been reviewed and modified as under:

- (i) An arts department having at least four teachers with at least two teachers have M.Phil./Ph.D. or equivalent research work (b) a science department having at least six teachers of whom at least three hold M.Phil./Ph.D. degree or equivalent research work.
- (ii) The department subscribes to at least six standard journals in the subject.

- (iii) The department has at least one research project undertaken by faculty members/research fellows registered for Ph.D. degree under a teacher recognised for the purpose by the university.
- (iv) The minimum strength of full-time students in two years postgraduate course is twenty.

It has also been decided that the following guidelines may be followed for considering the proposals from postgraduate departments of the colleges:

Postgraduate courses in the college departments which have been functioning for over ten years i.e. courses started from 1972-73 or before could be considered for support keeping in view the general norms. In the case of other departments, assistance for all purposes may be given only if they satisfy the norms, otherwise at least if they satisfy (i), (iii) and (iv) of the revised norms, their proposals can be considered for all purposes, except buildings.

4.10 Assistance for Single Faculty Colleges: The Commission has finalised guidelines for providing developmental assistance to single faculty colleges viz. law colleges/teacher education/teacher training colleges, colleges of physical education/colleges of social work/colleges of home science/colleges of music and fine arts.

As in the case of arts, science, commerce and multi-faculty colleges, it has been decided that the eligibility conditions relating to over-all teacher-student ratio as laid down in the guidelines for assistance for a single faculty colleges may not be insisted upon for the present.

Conditions of viability of single faculty colleges for providing assistance during the Sixth plan period are as under:

(A) Law Colleges: Rs. two lakhs as ceiling of assistance

- (i) A college running three year LL.B. course must have a minimum enrolment of 200 in all the three years taken together unless it is a university maintained institution.
- (ii) There must be ten permanent full-time teachers exclusively engaged in teaching law at that institution.
- (iii) Teacher student ratio of 1:20 should be maintained. Where there are part-time teachers, their number should not exceed 25% of the total number of teachers employed in the law college.

(B) College of Social Work: Rs. two lakhs as ceiling of assistance:

- (i) The minimum number of students in a college of social work should be as under:
 - (a) Undergraduate 75 (3 years course)
 - (b) Postgraduate 50 (2 years course)
 - (c) Combined colleges (undergraduate and Postgraduate) 100
- (ii) A social work college with postgraduate students must have a minimum of four faculty members excluding the Head/Principal, all of whom (five) must hold professional postgraduate qualifications in social work.
- (iii) The optimum pupil-teacher ratio should be 8:1.
- (iv) No assistance will be available for purchase of jeep/vehicle even for field work.

(C) Teacher Education/Teacher Training Colleges:

Conditions of eligibility

For colleges offering B.Ed.:—Rs. two lakhs as ceiling of assistance

- (a) The minimum number of students in the college should be 70.
- (b) The minimum number of teachers in the college should be seven including part-time teachers on the basis of normal workload of a full-time teacher.
- (c) Teacher-student ratio should be 1:10 or better.
- (d) The admission of students in the college should not exceed the intake capacity prescribed by the University or the appropriate authority.

For colleges offering B.Ed. and M.Ed.:—Rs. three lakhs as ceiling of assistance.

- (a) The minimum number of students in the college should be 80.
- (b) The minimum number of teachers in the college should be ten including part-time teachers on the basis of normal workload of a full-time teacher.
- (c) Teacher student ratio should be 1:10 or better.
- (d) The admission of students should not exceed the intake capacity prescribed by the university or the appropriate authority.

4.11 Plan Assistance for Delhi Colleges: In December 1982, the Commission decided that Delhi colleges be brought within the purview of Sixth plan assistance but such assistance would be made available as per guidelines drawn

up for the purpose. The Delhi Colleges are now also eligible to receive assistance under the College Science Improvement Programme and the College Humanities and Social Sciences Improvement Programme.

In addition to the Sixth plan basic and developmental assistance under the scheme, the Commission provided assistance to Maitreyi College, Satyawati College, Zakir Hussain College, College of Vocational Studies for the construction of their new buildings. These colleges are presently functioning in rented buildings. The Commission has also agreed 'in principle' to assist the Institute of Home Economics, Mata Sundri College, Kalindi College, Bharati Mahila College, Deshbandhu College, Dyal Singh College, Bhagat Singh College, School of Correspondence Courses and Continuing Education, Delhi for the construction of their new buildings or extension of their existing buildings.

The Commission has also accepted the proposal of Delhi University for starting B.Sc. (Hons.) physics and chemistry and B.Sc. (Gen.) Group 'A' so as to provide 300 additional seats in eight colleges during the session 1983-84.

4.12 Grants paid for General Development: Grants paid to colleges for general development and other schemes during the period 1979-80 to 1983-84 are detailed in the following table. It will be seen that during 1983-84 grants paid for the development of affiliated colleges were about three times the grants paid for this purpose during 1982-83. This has happened in view of the fact that the programmes have now picked up and are being implemented in accordance with the revised guidelines.

Grants paid during 1983-84 for other schemes were also higher as compared to those paid during 1982-83 except for the schemes of COSIP and strengthening of undergraduate teaching institutions.

Table 4.2

Grants paid to Colleges for General Development and other Schemes*

(Rupees in lakhs)

<i>Sl. No.</i>	<i>Name of the Scheme</i>	1979-80	1980-81	1981-82	1982-83	1983-84
1	2	3	4	5	6	7
1.	Development of Affiliated Colleges	606.92	314.22	239.14	416.29	1,237.67
2.	College Science Improvement Programme	30.27	41.86	29.83	26.87	126.53

1	2	3	4	5	6	7
3.	College Humanities and Social Sciences Improvement Programme	20.27	43.69	52.82	36.44	80.39
4.	Students Aid Fund	15.74	1.60	—	—	—
5.	Centenary Grants	0.75	0.60	2.35	—	—
6.	Development of Postgraduate Studies in Science	24.73	30.40	12.42	24.21	39.80
7.	Development of Postgraduate Studies in Humanities and Social Sciences	26.31	17.62	8.61	2.54	17.83
8.	Strengthening of Undergraduate Teaching Institutions	—	—	0.50	0.90	0.70

*A statement of development grants to colleges (statewise) is given in Appendix XXI.

4.13 Number of Colleges Assisted: Information regarding colleges assisted during the year 1983-84 is given in the following table.

Table 4.3

<i>Scheme</i>	<i>Number of colleges assisted during 1983-84</i>
Basic Grants	381
Development of undergraduate education in colleges	713
Development of postgraduate education in colleges	88

SECTION 5

Development of Institutions deemed to be Universities

5.01 Section 3 of the UGC Act provides for declaring an institution of higher education other than a university to be deemed to be a university. This provision has been made in the Act to bring within the purview of the Commission, institutions which for historical and other reasons are not universities and yet are doing work of a high standard in an academic field and at university level. Granting of the status of deemed to be a university enables them to develop ideals expected of institutions at the level of higher education and research. The institution is generally expected to aim at strengthening its activities in its field of specialisation rather than make efforts towards growing into a multi-faculty university of the general type.

5.02 The Commission has revised the guidelines for considering proposals for declaring an institution as a deemed university. The type of institution that may be recognised as 'deemed to be university', should generally be (i) an institution, engaged in teaching and research in chosen fields of specialisation and should have maintained the highest academic standards, (ii) in the fields of its specialization, the institution should have a very high standard and should be making a distinct contribution to university educational system including innovative undergraduate programmes and significant extension activity and by bringing it under the UGC Act, the university system would be enriched. (iii) the granting of a deemed university status would further enhance the development of the area of specialization, teaching and research activities, in that institution, and (iv) the institution has the necessary financial resources and viability and a management capable of contributing to university ideals and traditions.

5.03 The first institution deemed to be university came into existence in the year 1958 when the Indian Institute of Science, Bangalore was given the status of an institute deemed to be university. During the last 26 years, the number of such institutions has grown steadily. In 1983-84 there were 15 such institutions recognised as institutions deemed to be universities.

5.04 The table given below gives information regarding these institutions along with the year during which these were established and the year when it was agreed to give them the status of deemed to be university.

5.05 Maintenance Grants: The quantum of grants paid to institutions deemed to be universities during 1979-80 to 1983-84 is given in Table 5.1.

Table 5.1

Sl. No.	Name of the Institution	Year of Establish- ment	Year during which recog- nized	Enrol- ment during 1983-84
1.	Indian Institute of Science (Bangalore)	1909	1958	547
2.	Indian Agricultural Research Institute (New Delhi)	1905	1958	566
3.	Gurukul Kangri Vishwavidyalaya (Hardwar)	1900	1962	394
4.	Jamia Millia Islamia (New Delhi)	1920	1962	2241
5.	Gujarat Vidyapith (Ahmedabad)	1920	1963	537*
6.	Tata Institute of Social Sciences (Bombay)	1936	1964	278
7.	Birla Institute of Technology and Science (Pilani)	1964	1964	2210
8.	Indian School of Mines (Dhanbad)	1926	1967	703
9.	Central Institute of English and Foreign Languages (Hyderabad)	1958	1973	279
10.	Gandhigram Rural Institute (Gandhigram)	1956	1976	584
11.	School of Planning & Architecture (New Delhi)	1959	1979	383
12.	Dayalbagh Educational Institute (Agra)		1981	1153
13.	Sri Sathya Sai Institute of Higher Learning (Prasanthi Nilayam)		1981	533
14.	Banasthali Vidyapith (Rajasthan)		1983	882
15.	Indian Veterinary Research Institute (Izatnagar)		1983	N.A.

*Relates to 1982-83.

Table 5.2

(Grant paid in lakhs of Rupees)

Y E A R

1979-80 1980-81 1981-82 1982-83 1983-84

Institutions deemed to be

Universities

566.50 732.01 788.79 839.58 1037.98

experimental ICAR with the integrated solution to the rural work community life, action research and village extension is planned along the Gandhian model of rural reconstruction.

(ii) The Institute has started offering an M.A. course in communication English (evening course) besides M. Phil. courses in Gandhian Thought and Peace Science, and Micro-Level Planning during 1983-84. The Institute has also introduced doctoral programme for the teachers of Gandhigram Rural Institute, Gandhigram in rural development, extension education, social science, economics and co-operation.

(iii) The Government of Tamil Nadu has instituted a fellowship in the name of Mahakavi Bhavathian.

(iv) The courses offered in the Institute being inter-disciplinary in nature and content, the main feature is the integrated approach to the teaching programme. The students of both undergraduate and postgraduate courses are involved in research activities pertaining to their courses. Accordingly, a number of research projects were completed while some are in progress.

(v) The course for B.A. Rural Service (Co-operation) was restructured into B. Cop. and efforts made for improving standards. A number of publications and books are under preparation by the teachers of the Institute. An examination reform unit has been started in the latter part of the year under report.

(vi) The Institute organized a workshop on population education in universities and colleges, seminars on rural industrialization and inter-disciplinary approach to peace building. In a training programme organized by the Institute, 43 national service volunteers hailing from different parts of the country were trained by Informations Development and Resource Agency (IDARA). A re-orientation camp was held for the officers of Khadi and Village Industries Comumission Board, Tamilnadu, besides other training programmes in seed treatment of paddy with agrason and potassium chloride, minor repairs and maintenance of motor pumpsets. For dryland farm families also, training programmes were conducted relating to cultivation aspects, plant protection for groundnut, control measures and seed treatment of pulses and micro nutrient application.

(vii) The Institute has a 'Service area' of 26 villages and a complex of ten villages has been identified and selected for intensive rural development programmes. Village Planning Committees have been formed in the villages and annual plans are conceived and finalised at a joint meeting of development officials, representatives of financial institutions and faculty members.

The village communities and the academic society of the Institute work in hand in a number of developmental activities.

viii) The special feature of this Institute lies in its strength in identifying areas of felt needs of the village communities and designing tailored programmes. For this purpose, ten-day special camping programmes and several camps including flood-relief camps were organized. The Institute continued its activities under the extension service programme with focus on the economically and socially backward sections.

(ix) Under innovative programmes, the Institute took up research-monitoring and evaluation of social forestry scheme. It also introduced earn while you learn scheme. 50 students from all faculties were assigned part-time jobs in farm, library, maintenance of hostel accounts and village industries etc.

(x) For women, adult education centres are run, and both ante-natal and pre-natal care and nutritive education is carried out in villages besides economic programmes for them. An exhibition depicting the evils of dowry system, the role of women, and their education was also organized by the Institute.

(b) *Gujarat Vidyapith*

(i) New courses such as M.Phil. in Science and Non-violence, and an inter-disciplinary course under the auspices of the Peace Research Centre to promote interaction between philosophy of science and non-violence have been introduced. The home science course for women is being strengthened. Home science, agriculture and social work has been introduced as part of restructured undergraduate course for rural service. Research projects on social status of rural women, progress of women's education in rural areas, problems of bio-gas under energy studies have been formulated.

(ii) The Vidyapith has decided to admit students with minimum 50% to most of the postgraduate courses, subject to relaxation for weaker sections from rural areas. Besides, an entrance test to determine students basic aptitude for the subject has also been introduced. It has also been decided to raise the pass mark in the bachelor's degree from 45 per cent to 50 per cent.

(iii) A survey in over 40 villages was conducted to determine the learning needs of ordinary people of villages. Short term courses on bio-gas, self-employment, food processing, population education etc. were also formulated, apart from 160 adult literacy classes conducted under the adult/continuing education programme.

(iv) During the year under report, eight faculty members participated in academic conferences, seminars and workshops etc. In addition to two books, eight papers/articles were published by the teachers in the university journal.

(i) An integrated Masters degree engineering course of four years duration was introduced from the session 1983-84 for B.Sc. graduates in the Departments of Electrical Engineering, Electrical Communication Engineering and Mechanical Engineering.

(ii) About 220 faculty members participated in conferences/seminars in India and abroad and about 750 papers were published in various national and international journals.

(iii) For community services, extension programmes and interaction with the society and neighbourhood, facilities were provided to a wide spectrum of professionals ranging from high school teachers to research scientists for improvement of their knowledge. 48 courses were conducted in three semesters with a total participation of about 2,400 persons during the year. Five short-term courses were organized and more than 300 participants took part under the quality improvement programmes for teachers. Besides organizing 13 self-financed extension courses for persons working in industries and R&D establishments, an in-service training programme was conducted for high school science teachers. Under the extension programme, lectures were delivered by the faculty members at various places outside the campus.

(iv) The Curriculum Development Cell is working on the preparation of 42 manuscripts and 12 of them have already been published. Besides this, efforts are being made to develop audio-visual aids and demonstration units. The Institute conducted the mathematics olympiad for spotting and nurturing mathematics talent in schools and colleges.

(v) For the application of science and technology to rural areas, the fuel efficient wood burning stove was disseminated in two villages and a training programme for stove building was also conducted. A demonstration rural house has been built at a cost of Rs. 4,500 using pressed soil blocks. An experimental multi-tier forest programme using local and exotic tree species has been started with the objective of comparing biomass growth rates in monoculture and polyculture plantations.

(vi) The Centre for Scientific and Industrial Consultancy has undertaken several interesting real life problems of relevance to industries in a wide spectrum of scientific and engineering disciplines for public and private sector industries, R&D establishments etc.

(vii) The scientific output of the Institute has continued to be at a very satisfactory level. Three Scientists have been awarded the Shanti Sarup Bhatnagar Award.

(viii) Special facilities are provided for Scheduled Caste and Scheduled Tribe candidates, those who are called for technical tests/interview are paid T.A. and incidental expenses. Students who are about to complete their education are considered for suitable posts at the Institute. Stipends are

awarded to selected candidates to train them for suitable positions. The percentage of reservation in various groups has been increased in order to achieve the stipulations made by the Government of India.

(d) Tata Institute of Social Sciences

(i) The Board of Research Studies has as a first step towards encouraging the process of continuing education, provided for part-time registration of scholars for M.Phil. and Ph.D. programme. For the first time, the Institute organized a rural camp for the first year M.A. social work students to give experience of village life and rural India, to enable students to analyse and understand the problems of rural poverty, to help the governmental and non-governmental agencies and to understand the dynamics of development.

(ii) A number of seminars/workshops/short-term programmes on different subjects were conducted with participation by faculty members and persons from other institutions. Similarly, several faculty members attended and presented papers in seminars/conferences.

(iii) The Department of Urban and Rural Community Development was engaged in setting up two experimental field projects, one urban and the other rural. It also continued to be associated in the field work placements of students in the Eco-Development and Aerial Seeding—Project of the Government of Maharashtra. A modified programme under which "Organisational Development", "Corporate Planning" and "Collective Bargaining" have been introduced, was implemented. The attempt is to take into account changes in aspirations and expectations in personnel function. Three research studies covering various aspects of working, abandoned, neglected and abused children and infant feeding practice were completed. As in the past, research work on various issues related to the education of the Scheduled Castes and Tribes was continued. An action research project in one of the night high schools in Bombay was also undertaken for improving student performance in Algebra. The unit continued the long-term evaluation of the adult education programme in Maharashtra sponsored by the Ministry of Education, Government of India. Consultancy was provided to different service organizations in and outside Bombay and lectures were delivered on Organizational Behaviour, Disaster Management, and problems of Scheduled Castes and Scheduled Tribes.

(iv) During the year, the Urban Studies Unit completed six research projects. Four research studies are in progress. The Rural Studies Unit completed two research projects.

(e) Sri Sathya Sai Institute of Higher Learning

(i) The Institute has introduced five-year integrated courses leading to the award of Master's degree in philosophy and English language and literature besides evolving a core in bio-sciences.

(ii) Faculty members participated in academic conferences, seminars and workshops and published books and research papers apart from book reviews.

(iii) The Institute has introduced an admission test for initial entry into various courses.

(iv) The Institute has played an important part in the construction of buildings for schools and junior colleges in the neighbourhood. It also interacts with the neighbouring Ashram which has a large number of people coming from different parts of the country and abroad. As a part of social work, students of the Institute took up the cleaning of Harijan colonies, repair of roads, digging of soak pits, preparation of platforms for handbors etc.

(v) The Institute has developed its own question banks in several subjects and has introduced continuous internal assessment procedures and grading. The answer scripts are valued and returned to the students for proper feedback.

(f) Dayalbagh Educational Institute

(i) The Institute has completed the third year of its existence as a deemed university. During this period, the Institute initiated a number of innovative programmes and has now started consolidating the same.

(ii) The Institute offers a wide variety of restructured subject combinations which encourage practical orientation, local relevance and interdisciplinarity.

(iii) Under the national adult education programme and rural development schemes, the Institute has undertaken a number of projects like tree plantation, agricultural operation, campus improvement, sanitation, removal of illiteracy, extension etc. It also organized N.S.S. camps and undertook projects for tree plantation and environment improvement.

(iv) The Institute undertook a number of programmes in rural areas including film shows, lectures, medical aid camps etc.

(v) As part of its continuing education programme, the Institute offers programmes for women, drop-outs, out of school educated youth etc. It also organises remedial courses and vocational training schemes, tailoring, carpentry and knitting.

(vi) The examination system in the Institute is patterned on the seminar system and students who are not able to make the grade are given one more opportunity for improving their performance by opting for remedial courses.

(vii) The members of the faculty participated actively in academic conferences, seminars, workshops and summer institutes. They have also published a number of research papers during the period under report.

5.07 A statement indicating the grants paid to institutions deemed to be

universities during 1983-84 under Non-plan and Plan is given below:

Table 5.3

(Rupees in lakhs)

	<i>Non-Plan</i>	<i>Plan</i>	<i>Total</i>
1. Birla Institute of Technology & Science, Pilani ↳	—	4.26	4.26
2. Central Institute of English and Foreign Languages, Hyderabad	84.43	17.06	101.49
3. Dayalbagh Educational Institute, Agra	—	16.88	16.88
4. Gandhigram Rural Institute, Gandhigram, Madurai	45.06	21.33	66.39
5. Gujarat Vidyapith, Ahmedabad	60.77	22.78	83.55
6. Gurukul Kangri Vishwavidyalaya, Haridwar	28.77	5.41	34.18
7. Indian Agricultural Research Institute, New Delhi	0.07	0.35	0.42
8. Indian Institute of Science, Bangalore	509.20	255.63 0.44*	764.83 0.44*
9. Indian School of Mines, Dhanbad	172.69	38.28	210.97
10. Jamia Millia Islamia, New Delhi	116.04	38.00	154.04
11. School of Planning & Architecture, New Delhi	0.21	0.23	0.44
12. Sri Sathya Sai Institute of Learning, Prasanthi Nilayam	—	27.76	27.76
13. Tata Institute of Social Science, Bombay	46.21	8.16	54.37
—	—	—	—
Total	1063.45	456.13 0.44*	1519.58 0.44*

*By adjustment

SECTION 6

Non-Plan Grants to Universities

6.01 The maintenance grants are paid to the central universities in terms of the statutory provision under section 12(b) of the UGC Act to meet the deficit after taking into account salaries of teaching and non-teaching staff, maintenance of laboratories, libraries and other day-to-day requirements of the universities including funds for the retirement benefits of the employees. It also includes the institutions for professional education, i.e. Aligarh Muslim University—technical and medical; Banaras Hindu University—technical, medical and agricultural; and Visva Bharati—agricultural. In addition, the maintenance of the hospitals attached to medical colleges at the Aligarh and Banaras Hindu Universities is also met out of the maintenance grants.

6.02 Table 6.1 shows the break up of non-plan grants paid to the universities during the years 1979-80 to 1983-84. It may be mentioned that from 1st April, 1979 non-plan grants include scholarships and fellowships under engineering and technology, teacher fellowships, national fellowships, national associate-ships, national lectures, utilization of services of retired teachers, research fellowships and grants payable to non-university institutions for fellowships and awards as decided by the Government of India. These grants are for central as well as the state universities, subject to the agreed level of expenditure.

Table 6.1

(Amount in lakhs of Rupees)

	1979-80	1980-81	1981-82	1982-83	1983-84
(i) Block grants to central universities	2842.50 0.50*	3207.00 0.50*	3651.00	4493.58	5329.74
(ii) Grants paid to ¹ universities institutions for specific purposes	(a) 9.00	(a) 9.00	(b) 11.50	(c) 30.47	37.27
(iii) Maintenance ² grants to constituent/affiliated colleges of Delhi University	1051.98 76.88*	1159.89 53.00*	1380.01 60.69*	1629.01 24.68*	1975.14 57.05*
(iv) Schemes not covered under block grants**	32.56	58.00	60.92	150.00	148.00
(v) Scholarships and fellowships	583.72	385.37	493.49 0.04*	368.47 0.01*	279.99 1.97*

For explanation of 1, 2, and ** see page 67.*

Note Table for Table 6.1

- (a) For Roorkee University for the maintenance of Water Resources Development Training Centre, (b) for Roorkee University for the maintenance of Water Resources Development Training Centre and School of Research and Training in Earthquake Engineering, (c) for Roorkee University as stated in (d) and for Anna University.
- Since the transfer of the scheme from the Ministry in 1955-56 the Commission has been paying maintenance and development grants to a number of colleges of the University of Delhi. The Commission pays 95 per cent of the approved deficit for affiliated/constituted colleges and cent per cent of the approved deficit for university maintained colleges. The items of expenditure, inter-alia, include pay and allowances of the teaching and non-teaching staff, books and journals, retirement benefits and other charges. The Commission also pays grants for the mess staff of the hostels attached to some of the Delhi colleges on sharing basis of 75:25.
- The figures do not include the administration charges of UGC amounting to Rs. 77.41, 90.51, 105.11, 120.80 and 141.31 lakhs during the years 1979-80, 1980-81, 1981-82, 1982-83 and 1983-84 respectively.

*By adjustment.

** These include health service scheme and house building advance to central universities and institutions deemed to be universities.

6.03 Grants to Central Universities: Grants paid by the Commission towards the maintenance of central universities for the year 1979-80 to 1983-84 are indicated in Table 6.2.

Table 6.2

(Amount in lakhs of Rupees)

Sl. No.	University	1979-80	1980-81	1981-82	1982-83	1983-84
1.	Aligarh Muslim University	730.00	813.00	915.00	1162.83	1322.25
2.	Banaras Hindu University	976.00	1065.00	1212.00	1602.75	1790.58
3.	Delhi University	503.00	585.00	657.00	785.71	983.33
4	Hyderabad University	97.00	116.00	133.50	137.51	173.42
5.	Jawaharlal Nehru University	267.50	313.50	358.00	407.82	495.83
6.	North Eastern Hill University	79.00	90.00	104.00	118.00	176.75
7.	Visva-Bharati	190.00	224.50	271.50	278.96	387.58
	Total**	2842.50	3207.00	3651.00	4493.58	5329.74
			0.50*			

*By adjustment.

**The increase in non-plan grants paid during 1979-80 to 1981-82 as compared to the earlier years is mainly due to (a) taking over of the Fifth plan committed expenditure, (b) payment of grants to Hyderabad and North Eastern Hill University under non-plan from 1979-80 onwards, (c) payment of additional dearness allowance and (d) payment of advance on account grant during 1981-82 for 1982-83, during 1982-83 for 1983-84 and during 1983-84 for 1984-85.

6.04 Maintenance grant for colleges located in Varanasi and brought within the privileges of the Banaras Hindu University: Maintenance grants have so far been made available by the Commission only in respect of the colleges of Delhi university. However, keeping in view the justifications for providing maintenance grants to the four colleges located in Varanasi and brought within the privileges of Banaras Hindu University, the Commission agreed to provide a maintenance grant to cover 50% of the deficit of maintenance expenditure (calculated at 95% and other 5% to be met by Management) as may be determined by UP Government which will continue to pay the other 50% as at present. It has also been agreed that the uncovered deficit in respect of these four colleges from 1978-79 may also be paid after taking into account the grant already made available by the UP State Government.

6.05 Committee to enquire into working of the Central Universities: The Commission appointed a Committee in January, 1982 to enquire into the working of the Central Universities. The Committee has since submitted its report. It has made several observations and recommendations on the working of the Central universities keeping in view its terms of reference. Some of the observations/recommendations made by the Committee are given below:

- (i) The Central universities as institutions of national importance should endeavour to serve the purposes of human resource development and national advancement by providing a wide variety of educational programmes to suit the needs and aptitudes of scholars with due regard to the manpower needs of the country. They should also strive to function as national institutions attracting students and faculty from all over the country. This alone can ensure their performance at a high level of competence. Admissions should be in accordance with physical facilities available and should be entirely based on merit. Appointment of the teaching staff must also be made on merit so as to avoid inbreeding which is quite high at present.
- (ii) A series of steps have been suggested to improve corporate life, sports, campus facilities and to involve students and teachers in participatory management. At the same time, measures have been suggested to improve discipline and to make executive decisions free of pressures from individuals or groups.
- (iii) Changes in the Acts have been recommended so that objectives of the institutions are defined and they are enabled to play a significant role in national development and relationship with other statutory bodies such as the UGC which is concerned mainly with coordination and maintenance of standards are reflected in a realistic measure. It is recommended that Government should have the power

to make statutes in consultation with the universities and the UGC in special circumstances.

- (iv) A Council of the Central Universities is recommended to be set up in order to coordinate policy particularly on issues such as service conditions or emoluments where action by individual institutions leads to problems for others. Planning would also be facilitated.
- (v) The Acts of the Central universities have a grave omission in that while the UGC is responsible through its own Acts for determination, maintenance, coordination and improvement of standards of university education and research, the university Acts make no mention of the relationship with the UGC and give an impression that the universities are entirely on their own in this sphere.
- (vi) It is recommended that the Commission in consultation with the Central Government should in future prepare a separate developmental plan for the Central universities.

The Commission in December, 1983 while generally accepting the recommendations contained in the Report made the following observations:

- (a) Since the recommendations made in the report are based upon sound academic and management considerations, several of these would be equally applicable in the case of State universities.
- (b) Recommendations made by the proposed Council of the Central universities regarding terms and conditions of service of the employees and related matters having financial implications would need the approval of the Central Government before implementation and this may accordingly be provided in the concerned Acts and Statutes.
- (c) The Constitution of the planning and Evaluation (Monitoring) Board in the universities be suitably expanded with some addition of some outside members so as to enable it to discuss the development of the University in a broader perspective.
- (d) Since it may not be possible, at any rate, at this stage, to bring the employees of Delhi University and its colleges within the purview of C.G.H.S., an alternative scheme may have to be worked out.
- (e) Facilities for physical education, games, sports and cultural activities need strengthening in the universities and teachers in the universities should be encouraged to play an effective role in such activities.
- (f) The Commission while implementing the recommendations relating to student amenities, corporate life and facilities for teachers in the Central universities may also keep in view the similar requirements of the State universities and institutions deemed to be universities.

Steps have been initiated to implement the recommendations of the Committee in consultation, where necessary, with the different agencies concerned.

6.06 Sub-Plan for the developmental needs of the Central Universities. The Commission has generally accepted the recommendations made by the Working group appointed to prepare a sub-plan for meeting the developmental needs of the Central universities and agreed to the additional allocations as indicated below to be made available to the Central universities for their academic programmes in the remaining period of the Sixth Plan. The requirements of the academic programmes of the Central universities are to be examined with the help of visiting committees.

<i>Universities</i>	<i>Rupees in lakhs</i>	
	<i>Sixth Plan allocation already available</i>	<i>Additional amount for academic programmes</i>
Aligarh Muslim University	150	60
Banaras Hindu University	150	60
Delhi University	150	60
South Delhi Campus	100	40
Jawaharlal Nehru University	150	60
North Eastern Hill University	200	80
Hyderabad University	200	80
	1,100	440

SECTION 7

Faculty Improvement Programme

7.01 It is widely recognised that the teacher has an important and vital role to play in the improvement of standards, as without his active participation, it is not possible to have any qualitative change in education. It is for this reason that the Commission has been supporting faculty improvement programmes, schemes of providing visiting professors and fellows, and schemes which would enable teachers to take time off their normal teaching and engage themselves in writing up the results of their studies and research. Book writing programmes are also supported.

7.02 It may be interesting to point out that in a recent survey done under the auspices of the National Commission for Teachers in Higher Education, it has been found that approximately seven per cent college teachers have M. Phil. and 15 per cent Ph.D. degrees; mostly obtained under the Faculty Improvement Programme. In the universities, 47 per cent lecturers, 76 per cent readers and 84 per cent professors are now holding the Ph.D. degree. A more comprehensive programme of teacher orientation and training is now recognised to be necessary in order that the teaching/learning situation may perceptibly improve and this is a proposed element in the Seventh plan.

7.03 The Commission has prescribed by regulation the minimum qualifications for appointment to various teaching posts in universities and affiliated colleges. These are the minimum qualifications prescribed by the Commission in the sense that any one with lower qualifications is not eligible to be appointed but if a university intends to raise the qualifications, it may do so. These qualifications have come into effect from July, 1983. It is now imperative that the universities make corresponding changes, if necessary, in their Statutes/Ordinances to observe the regulations.

7.04 The Commission has been supporting the efforts of universities and colleges in providing opportunities for teachers and research workers to keep abreast of modern developments in their fields of study with provision of grants towards organisation of seminars/symposia/refresher courses, workshops, conferences etc. The number of such programmes organised with UGC support during 1983-84 is given in Table 7.1.

7.05 The Commission has also redefined the scope and coverage of seminars/symposia/workshops and summer institutes as given below:

(a) *Seminars*: A seminar is intended to enable university and college teachers as also research workers to acquaint themselves with the latest development

Table 7.1

Sl. No.	Programmes	Humanities and Social Sciences	Sciences	Total
1.	Seminars	113	39	152
2.	Symposia	14	24	38
3.	Workshops	10	17	27
4.	Refresher Courses	10	7	17
5.	Summer Institutes	30	30	60
	Total	177	117	294

in their respective fields of work. It will also facilitate exchange of ideas with experts in the same or related fields. The seminars have, therefore, to be designed to meet the professional needs of university and college teachers. These will also enable them to obtain additional knowledge of the subject matter in their disciplines and help them to get acquainted with new research work in their areas as also new laboratory equipment, teaching techniques etc. The seminar should usually be of less than a week's duration and the selected themes of the seminars should be made known in advance to the participants. The seminar may take the shape of a lecture series by outstanding teachers in particular fields followed by intensive discussion by the participating members.

(b) *Symposia*: In the case of symposia, while the subjects will be the same as that of a seminar, the programme will be oriented towards exploration in teaching of specific topics or a related area which has become particularly significant for organising and streamlining curricular/research activities. It would therefore, be a discussion only on a particular topic although this could be covered by lectures by different members. The number of participants would normally be 35 to 40.

(c) *Workshops*: The workshops are also programmes intended for augmenting professional competence of the teachers. These are conducted under the direction of competent faculty members who provide specialised short-term institutional programmes covering recent advances in selected areas or a number of fields of special relevance. These programmes would include activities for improvement of teaching competence and advanced-level courses. In order to ensure the maximum utility of this activity to the participating teachers, the number of participants may be 25-30 and duration normally 2-4 weeks. If the programme is for graduate-level courses, it may not be of less than three weeks duration. Workshops may be organised to effect improvement of curriculum, teaching methods, examination reforms etc. It is necessary that at the end of the workshop, the performance of all

the participants is evaluated and the participants themselves do a self-evaluation indicating changes required to be effected in organising such programmes.

(d) *Summer Institutes*: The institute should be for updating courses and the areas should be identified by the subject panels. They offer programme comprising lectures of two weeks duration in the morning followed by 2-3 hours of laboratory work/field work/project work. There should be opportunities to the participants to confer with research personnel for obtaining their advice on matters like teaching aids, methods of presentation, project matters, planning of courses and other problems. Generally, the institutes may have 20-25 participants, but their number could go upto 50 depending upon the nature of course and the areas to be covered. The duration of the institute may be a minimum of three weeks and maximum of six weeks.

It has to be ensured that one or two all-India advanced level institutes are organised in each major subject every year on the basis of identification done by the subject panels. The location of these institutes should be done on regional basis. These are at two levels viz., refresher courses for graduates and post-graduates and advanced level courses for researchers, mainly under the auspices of the centres of advanced study, departments of special assistance and departments selected for research support.

7.06 Conferences: The conferences are meant for providing opportunities to faculty members and researchers to discuss their research findings. Generally, the conferences are arranged along with the annual meet of the professional societies and other organisations. The Commission provides a token contribution for state or regional or all-India or International level conferences. During the year 1983-84, the Commission provided assistance to 135 conferences as below:

State level	23
Regional level	5
All India level	96
International level	11
 Total	 135

7.07 English Literature Seminars: On the recommendations of the UGC Advisory Committee on English literature seminars, two programmes during the year 1982-83 were organised one at the Panjab University, Chandigarh and the other at Madurai Kamraj University, Madurai. These seminars were organised during August/September, 1982. These two seminars covered various aspects of poetry and drama (post 1945) and were organised on all-India basis. No programme could be held during 1983-84.

7.08 National Fellowship: Thirty national fellowships are available under the above scheme for teachers of outstanding eminence to take a year or two off from normal duties to devote themselves exclusively to research and writing of results of their study.

Teachers selected under the programmes receive their normal salary and allowances and a fellowship allowance of Rs. 500 per month in addition to a grant of Rs. 5,000 a year for secretarial assistance, travel and contingency expenditure. During the year 1983 no awards could be made under the scheme as the procedure for inviting nominations was under review. The comments of experts were awaited in a few cases. Seven awardees including those selected earlier were working under the scheme at the end of the year.

7.09 National Associateship Scheme: In 1970, the Commission initiated the scheme of national associateships to enable outstanding young teachers from universities and colleges engaged in research to visit and work for short periods at universities, research institutes, national laboratories etc. which have special facilities relevant to their respective fields of study and research.

Initially, the Commission instituted two types of awards viz., for five years and one year with 300 and 100 positions earmarked respectively. Later on, a third category of three-year award was also introduced and simultaneously a one-year award to non-university institutions with 100 placements had been provided for. The overall position of awards and positions filled in during 1983-84 is as under:

	<i>Total placements</i>	<i>Positions filled in</i>
One year awards	100	9
Three years awards	150	10
Five years awards	150	3

7.10 National Lectures: The scheme of national lectures was initiated in 1970-71 to enable outstanding teachers and research scholars to visit universities/colleges for delivering a series of lectures in their special fields and to participate in academic programmes of host institutes. The Commission provides to the selected teachers an honorarium of Rs. 1,500 and a grant of Rs. 250 for preparation of lecture aids in addition to travel expenses. During 1984-85 teachers drawn from several major subjects and disciplines participated in the programme. The Commission, in addition to the above provisions has also decided to pay the actual fare incurred on taxi-fare from the place of duty to the port of embarkation and/or the railway

station and back and vice-versa, for delivering lectures under the above scheme.

7.11 Fellowships for Teachers: The Commission has been implementing a programme of faculty improvement for teachers since 1975. The main thrust of the programme is towards improving the competence of teachers concerned with undergraduate teaching particularly the younger faculty members so that not only their subject matter competence would be increased but also efforts should be made to improve the methodology of teaching. The deployment of college teachers for acquiring research degrees M.Phil./ Ph.D. is considered to be one of the important programme of faculty improvement.

The teacher fellowship scheme has been under implementation since 1975. Initially the teachers were selected by the Commission for the award of teacher fellowship. Subsequently, the scheme was decentralised (partially) by identifying 338 departments of universities/institutions of higher learning authorising them to make selection of teachers for the awards with the provision that the number of such awards should not exceed ten fellowships at any given time in each identified department. (The direct selection was discontinued from June, 1978).

The teacher fellowships are meant for teachers from affiliated colleges offering undergraduate instruction in humanities, social sciences and science subjects to work towards either an M.Phil. or Ph.D. degree from one to three years period in an institution having necessary facilities for such advanced study and research within the country. Professional colleges offering courses of medicine, agriculture and engineering are not covered under the scheme. However, teachers in basic sciences and social sciences working in the professional colleges of the categories referred to above are eligible for award of teacher fellowships.

The numerical position of the awards/identified departments is as under:

(a) *Departments Identified*

<i>Sl. No.</i>	<i>Purpose</i>	<i>Identified Departments</i>	<i>Remarks</i>
1	2	3	4
1.	Number of Departments identified under Faculty Improvement Programme	338 (225 in science subjects & 83 in humanities and social sciences)	Number of teacher fellowships in the department should not exceed ten at any given time.
2.	Number of Departments identified under Department of Special Assistance Programme	52 (32 in science subjects and 20 in humanities and social sciences).	Number of teacher fellowships in the department should not exceed ten at any given time. The university could select as many teachers as possible from colleges not affiliated to them.

3. Number of Departments identified under Centres of Advanced Study	23 (14 in science subjects and 9 in humanities and social sciences)	-do-
		Additional teacher fellowships of one year duration meant for university teachers where no substitute lecturer's salary is paid are also provided in CAS/DSA.

(b) *Teacher Fellowships allocated*

<i>Sl. No</i>	<i>Purpose</i>	<i>Identified Departments</i>	<i>Remarks</i>
1	2	3	4
1.	Number of teacher fellowships allocated to Delhi University	50 (for all departments other than Centres of Advanced Study/Departments of Special Assistance)	Number of fellowships should not exceed 50 at any given time
2	Number of teacher fellowships allocated to Jawaharlal University.	31 (for all subjects)	Number of fellowships should not exceed 31 at any given time.
3.	Number of teacher fellowships allocated to Government College, Andaman Nicobar Island, Fort Blair.	5 Yearly	

(c) *Fellowship Awards under centrally administered scheme*

Teacher fellows selected directly (Scheme discontinued in 1978).

The teacher fellowship scheme had been under review for some time. The Commission in October, 1982 has decided as under on the basis of the review of the scheme.

(i) In view of the fact that provision for teacher fellowships has since been made under the Sixth plan scheme of assistance to colleges as part of the basic grants and also as part of the developmental assistance available to the colleges, the existing scheme of teacher

fellowships allocated to identified departments in the universities may not be continued but those teachers who have already been awarded teacher fellowships may continue for the period of their awards. The teacher fellowships would however, be continued in the departments recognised as Centres of Advanced Study/Departments of Special Assistance.

- (ii) Only additional teacher fellowships of one year duration made available to the departments participating as centres of advanced study and departments of special assistance may be continued to be utilised by both university and college teachers on the existing basis.
- (iii) The outstation living allowance may be increased from Rs. 250 to Rs. 500 per month with effect from 1st November, 1982. The contingency grant for teacher fellows registered for Ph.D. may be increased from Rs. 1,500 to Rs. 3,000 per annum. There would be no increase in the contingency grant for teacher fellowships for M.Phil.

The Commission's assistance for teacher fellowships for both the substitutes salary as well as contingent grant etc. would be available only for one year for M.Phil. and for a period not exceeding four years for Ph.D. including M.Phil., wherever provided. Teachers who may have done considerable work towards Ph.D. could also utilise one year fellowship to complete their work.

7.12 Merit Promotion Scheme: A scheme of merit promotion for teachers has been introduced from January, 1983 with a view to providing suitable opportunities to teachers working in universities and colleges for career advancement in recognition of their significant contributions in the field of teaching, research and related educational activities. The scheme is intended to be in the nature of a flexible, complementing scheme where a teacher after critical assessment of his work at the end of a specified period can be promoted to the next higher level and the position thus held by him is treated as personal to the incumbent and no resultant vacancy is required to be filled. It is felt that such a scheme would go a long way in encouraging teachers to engage in teaching, research and other academic activities and make a distinct contribution to the teaching profession and thus help to improve the quality and standards of higher education.

The basic features of the scheme for university teachers are as given below:

- (i) It is a merit promotion scheme where no automatic time-bound promotion based on a fixed number of years of service/rendered by a university teacher is involved. The merit for such promotion will

be determined by a selection committee as required to be constituted under the Act/Statutes of the university for normal recruitment to the posts of Reader/Professor.

- (ii) The number of teachers promoted will not exceed one third of the positions available in the next lower cadre i.e. lecturers/readers.
- (iii) Only those teachers will be eligible for promotion to next higher grade who have completed eight years of continuous service in the normal cadre, out of which at least four years should be in the institution where a teacher is being considered for such assessment and merit promotion. The minimum number of years laid down as one of the eligibility conditions for consideration under the merit promotion scheme would relate to the period spent as a regular lecturer and would not take into account the experience, if any, as temporary/ad-hoc/assistant lecturer/demonstrator/instructor/research assistant etc. The Commission has, however, agreed that if any university desires to prescribe higher limit of years of service for eligibility for consideration under merit promotion scheme, it can do so.
- (iv) While the final selections of university teachers to be promoted have to be made by the university in accordance with the Act/Statutes, it would be necessary to assess the work including research, publications, book reviews, curriculum development, teaching aids, innovations in teaching methods, and equipment development etc. presented by the eligible teachers.
- (v) Teachers interested in such assessment consideration of merit promotion should present their work to the university through their department latest by 31st December each year or a date stipulated by the university and the university should generally take a decision before the beginning of the next academic year so that such promotions can become effective from the date of the beginning of the next academic session.
- (vi) While calculating the number of positions for purposes of merit promotion, wherever more than point five (0.5) fraction arises it may be rounded up as one (1.0) for the purposes of merit promotion.
- (vii) In case of a language department, if the number of teachers is less than three but persons are senior, the university can combine two language groups viz., Hindi and Sanskrit and create a promotion channel for the senior most reader eligible for promotion.

The main features of the merit promotion scheme for college teachers are outlined below:

- (i) Teachers working in colleges affiliated to a university and included under section 2(f) and which come within the purview of section 12(a)

of the UGC Act, who have made significant contribution and achievement in the field of teaching and research may be considered for merit promotion, if they have put in a minimum of eight years of permanent service as a teacher of which at least four years have been in the institution where he/she is being considered for such assessment for merit promotion.

- (ii) The number of teachers promoted under the scheme will not exceed $33\frac{1}{3}$ of the total number of permanent posts in the college, spread over a period of three years.
- (iii) In the case of lecturers in the government colleges, the minimum period of eight years service for being eligible for consideration for merit promotion may cover continuous service in more than one college.
- (iv) The Commission would make a contribution of Rs. 600 per annum for each person promoted under the above scheme. Assistance indicated would be upto 31st March, 1985. Thereafter, it has to be treated as committed expenditure to be taken over by the state Government concerned/or to be met out of the colleges own resources as the case may be.

As on March 31, 1984, 29 universities (5 central universities and 24 state universities) and 5 institutions deemed to be universities had agreed to implement the merit promotion scheme.

7.13 Visiting Professors/Visiting Fellows: The guidelines for implementation of the scheme of visiting professors/visiting fellows have since been further revised so that superannuated persons can also be considered for appointment as visiting professors and visiting fellows. These are detailed below:

(A) Visiting Professors

(i) A Visiting Professor should be an eminent scholar in his field. Generally a person who has held or is holding the post of a professor should be considered for appointment as visiting professor. In case a university desires to appoint any other person under the scheme of appointment of visiting professors, it should send the necessary bio-data etc. and obtain the prior concurrence of the Commission.

(ii) The maximum tenure of appointment of a visiting professor should be one year and the minimum not less than three months, provided that a person who has been appointed and acted once as a visiting professor for a period not less than three months or upto one year should not be reappointed by the same university.

(iii) A professor should not be appointed as a visiting professor in the same university in which he held a post immediately before or after superannuation.

(iv) A person appointed as a visiting professor from outside the country may be paid an honorarium upto Rs. 3,000 per month. In case a person already serving in an Indian university or an institution is appointed as a visiting professor, the honorarium payable should be determined on the basis of the salary plus 20% of the basic pay plus the dearness allowance and other allowances if any admissible (except conveyance allowance, if any) according to the rates of his parent university/institution. The receiving university would also contribute towards his pensionary benefits/CPF as per usual rules.

(v) If a superannuated person is appointed as a visiting professor, the honorarium payable to him should not exceed Rs. 2,000 per month excluding any superannuation benefits.

(vi) If a university proposes to appoint a person who has attained the age of 62 years or more but upto the age of 65 years as visiting professor, it should send the necessary bio-data and obtain the prior concurrence of the Commission.

(vii) If a person working abroad on a permanent basis is invited as a visiting professor, a university may meet the cost of international air travel by economy class by the direct route. This will not be applicable to a person who is returning to India at the end of his foreign appointment to take up the visiting professorship. Visiting professors appointed from within the country may be paid travel expenses in accordance with the rules of the university.

(viii) It is expected that when a serving person is appointed as visiting professor, the parent university would give him academic leave without pay.

B. Visiting Fellows

(i) A visiting fellow should be a scholar of eminence in his subject. Superannuated persons upto the age of 65 years may also be considered for appointment as visiting fellows. The minimum tenure of a visiting fellow will be not less than two weeks and the maximum upto eight weeks. The following expenditure be met out of the grant placed at the disposal of a university for appointment of visiting fellows.

(a) Payment of daily allowance not exceeding Rs. 100 per day for visits upto one month. For visits beyond one month, the rate may be as in the case of visiting professors.

(b) Travel expenses in accordance with the rules of the university.

(ii) It is expected that the parent institution will grant to the visiting fellow academic leave with pay and allowances as usual for the duration of the appointment as visiting fellow, if a serving person is appointed.

- (iii) It is expected that the host university would provide accommodation to the visiting fellow in the university guest house free of charge.
- (iv) The same person may not be invited as visiting fellow more than once in a year in the same university.

7.14 Professors of Eminence: The Commission has agreed to the scheme of Professors of Eminence in the universities in accordance with the general guidelines approved by the Commission for this purpose. This scheme would provide for not more than 100 positions at any given time and persons who are in the service of the universities upto the age of 60 years would be considered under the scheme. In case where such persons are re-employed by the universities, beyond the age of 60 years, they may continue as professors of eminence. Accordingly, the universities have been requested to send well-considered proposals from the departments of humanities, social sciences, physical, natural and earth sciences for consideration under this scheme. The nominations received from universities are being processed.

7.15 Emeritus Fellowships: The Commission in July, 1983 agreed to the creation of emeritus fellowships with a view to utilising the services of highly qualified and experienced superannuated professors in universities, upto the age of 65 years for special purposes by the Commission. The total number of emeritus fellowships at any given time may not exceed 25 and the persons invited as emeritus fellows may be paid an honorarium of Rs. 1,500 per month besides their usual superannuation benefits. The contingency and other expenditure to be made available to them is to be decided on the nature of the assignment. Selections under the scheme are being finalised.

7.16 Research Scientists: With a view to promoting high quality research in science, social sciences and humanities in the universities, the Commission has taken the decision to create 100 positions of Research Scientists in science and 100 positions in the humanities and social sciences in grades of lecturers, readers and professors. Persons of outstanding merit will be centrally selected through a rigorous process for these appointments which will be for a period of five years in the first instance. There will be a review of the performance before the five year period ends, and if it is found to be in accordance with the initial promise and of a very high quality, the research scientist will be promoted to the next higher grade. These scientists, who will be provided requisite facilities will be able to devote all the time for research, and they may do only some teaching.

The novel feature of this decision is that a scientist will not be competing for promotion with existing lecturers or readers since he will draw his salary directly from the Commission. He will be competing with himself and hence will be able to perform at his best. It is believed that this will promote excellence and prevent many potential researchers from going abroad.

7.17 Travel Grants: The Commission has also been providing financial assistance to the extent of 50% to the college teachers for attending International academic conferences abroad for presenting papers resulting from their research work. The procedure for considering such proposals for assistance by the Commission has since been revised. Travel grants to university teachers for participating in international conferences are met from the unassigned grants. The main features are as given below:

- (i) The decision of the Commission to agree or not to agree to provide 50% of the expenditure involved, would be based upon referees evaluation/comments on the paper to be presented, with regard to its quality, standard and suitability.
- (ii) Teachers who are selected for travel grant assistance may, if they so desire, spend upto two weeks in the country where the conference is held and they should utilise the period outside the conference days for visiting institutions in the subject field and the work plan for such visits should be submitted alongwith the proposal.
- (iii) The Commission while calculating its 50% share of assistance in respect of proposals accepted by it, will take into account the following expenditure only.
 - (a) Both ways actual first class train/bus fare for travel in India from place of work to the nearest airport.
 - (b) Air fare (economy class) by Air India from airport in India to the nearest airport in the country where the conference is held. The teachers would be encouraged to avail of excursion ticket for air travel which requires a minimum stay of 14 days, if it is economical, i.e. if the total cost of excursion air fare plus per diem for 14 days does not exceed economy air fare plus per diem for conference days.
 - (c) Registration fee
 - (d) Airport tax
 - (e) Daily/maintenance allowance.
- (iv) The college/state government/university/Indian National Science Academy/Department of Science and Technology/United Nations Development Programme/any recognised association or organisation may meet 50% of travel expenses and airport tax while 50% of maintenance and registration charges could be met by them or by the teacher himself.

7.18 Career Awards: The Commission initiated the scheme of Career Awards to young scientists in the year 1979-80. The purpose of the scheme is to identify young talented scientists to have established competence and

good potential in their areas of specialisation and to promote their professional growth by enabling them to devote their efforts and energies early in their career for research and study with minimum teaching responsibility.

These awards are offered for a period of three years to lecturers or readers who are not more than 35 years of age and who have completed doctoral or post-doctoral or other equivalent professional training. The Commission pays the awardees their full salary and allowances. In addition, the Commission provides each awardee a research grant upto Rs. one lakh and two or three research fellows. The awardees are also expected to take part in teaching work of the department. The scheme has been extended to cover social scientists and teachers from humanities from the year 1979-80. During the year 1983-84, fifteen awards have been made in the humanities and social sciences.

7.19 Participation of Retired Teachers: The Commission has agreed that the honorarium payable to superannuated teachers participating in approved research projects as principal investigator may be enhanced from Rs. 9,000 per annum to Rs. 12,000 per annum which effect from 1st August, 1983.

7.20 Rotation of Headship: The Commission in July, 1983 considered the recommendations made by the conveners of subject panels regarding the rotation of departmental headships followed in some universities. It was felt that rotation of headships should not be obligatory and where this is done, it should generally be confined to professors in the department. However, in case of departments where there is only one professorship, readers could be considered, not necessarily on the basis of seniority but on the basis of academic and administrative ability of individual faculty members.

7.21 Staff Quarters and Teachers Hostels: The Commission continued to provide grants on a limited basis towards the construction of staff quarters and teachers hostels. These included construction works approved during the Fourth plan period and those taken up on the recommendations made by the Fifth plan visiting committees.

The Commission in March, 1983 accepted the recommendations of a committee and agreed that the norms for accommodation for staff quarters for teachers and for teachers hostels may be revised as under:

Staff Quarters

Plinth Area

Accommodation

(a) Type I : Professor/Readers houses/flats

Basic structure 155 square meters.

Notes :

(1) 50% of the houses/flats may be built with 40 square meters servants quarters and garages

(2) 50% of the houses/flats may be built with 5 square meters scooter shed.

(3) These facilities (servants quarters, garages and scooter sheds) could be provided in a separate block so that any one having a car or a servant with family could be assigned the same.

(b) Type II : Lecturers Quarters 100 square meters.

(c) Teachers Hostel (upto four storeyed)

- (a) 610 square feet (for single).
- (b) 739 square feet (for married couple) In addition common facilities in different floors may be provided.

During 1983-84, grants amounting to Rs. 145.47 lakhs were paid towards the construction of staff quarters and Rs. 5.90 lakhs for the construction of teachers hostels.

SECTION 8

Students

8.01 The Commission gives high priority to student welfare programmes and to such special measures as would enable students to pursue their studies and researches under congenial conditions. Such measures are particularly important in the context of the complex problems facing students in the country. The Commission also recognizes the need for programmes which would bring about the emotional, cultural and national integration of students by increasing their mobility and other appropriate measures. Universities and colleges with their national and cosmopolitan character and with their concern for the development of a rational, scientific and objective outlook in all matters also have a special role and responsibility in this regard.

8.02 The development grants paid by the Commission to the universities and colleges for various purposes such as the appointment of additional staff, construction of academic buildings, strengthening of libraries and laboratories, purchase of equipment and books and journals etc., all have a direct or indirect bearing on conditions under which students study and learn and the standards of teaching and research. Besides these programmes for the promotion of a congenial environment and conditions for study and research, the Commission has initiated a number of other programmes of student welfare, specially in regard to needy and poor students on the one hand and the meritorious students on the other. These include the provision of scholarships and fellowships, hostel facilities etc. These programmes are reviewed below.

8.03 Scholarships and Fellowships: The Commission has given high priority to the award of scholarships and fellowships for the development of research in universities and colleges. The objective of the scheme is to enable academically bright students to carry on their research as an independent and full time activity through adequate support for their maintenance and for the purchase of books, journals and equipments etc. by them. The Commission provides assistance towards junior research fellowships*, research associateships in science, humanities and social sciences and also research fellowships in engineering and technology. The Commission is also giving scholarships to the postgraduate students of the border hill areas.

In October, 1981, the Commission agreed to provide a lumpsum annual grant to the universities for meeting contingent needs of research scholars

*The research fellowships and associateships have recently been revised to much higher values and benefits, with concomitant improvement in research supervision and evaluation in the universities. The award of a Junior research fellowship can be made only to candidates qualifying in national test.

who are not in receipt of any scholarship/fellowship. The assistance for the purpose is given at two levels viz. Rs. 25,000 for universities having on an average full time research scholars upto 100 and Rs. 50,000 for universities which have more than 100 research scholars.

The Commission has released Rs. 11,96,000 to the universities under the above scheme.

8.04 Junior Research Fellowships: Universities are awarding junior research fellowships to the research fellows out of the fellowships allocated to them on any one given time basis. In all 2,826 fellowships have been allocated to 96 universities including institutions deemed to be universities at the end of 1983-84.

8.05 Research Associateships: The Commission awards 150 research associateships every year in science, engineering and technology, humanities and social sciences to provide an opportunity to research scholars and teachers to undertake advanced study and research. The fellowships are intended for students and teachers preferably below the age of 45 years (for women candidates upto the age of 55 years) who have obtained a doctorate degree. The value* of the research associateships has been fixed in four categories i.e. Category (A)—Rs. 900 p.m., Category (B)—Rs 1,100 p.m., Category (C)—Rs. 1,300 p.m. and Category (D)—Rs 1,500 p.m. In addition to this, a contingency grant of Rs. 4,000 p.a. is also provided to the students during the period. During the period under review, the Commission awarded 142 research associateships in science, engineering, humanities and social sciences.

8.06 Research Fellowships for Scheduled Caste/Tribe students: Ten per cent of the total number of junior research fellowships available with the universities on any one given time basis are reserved for students belonging to Scheduled Caste/Tribe communities. The universities have also been requested to award such fellowships to these reserved categories, failing which they would be surrendered to the Commission for making direct award to Scheduled Caste/Tribe students. In addition to this, the Commission is also awarding directly 50 junior research fellowships annually exclusively for Scheduled Caste/Tribe candidates. During the year 1983-84, the Commission awarded 56 junior research fellowships to Scheduled Caste/Tribe students.

8.07 Research Associateships for Scheduled Caste/Tribe Students: In addition to the above fellowships, the Commission has also reserved 40 research associateships for the Scheduled Caste/Tribe students. During the year under

*The associateships have been revived since.

review, only two applications were received and both of them have been awarded research associateships.

8.08 Research Associateships for Disabled Students: The Commission is awarding directly 30 research associateships to the physically handicapped students including blind, deaf and mute. However, during the year under review, the Commission could select only three research associate under this category.

8.09 Research Fellowships in Engineering and Technology: The Commission is awarding 60 research fellowships every year in engineering and technology to enable students to undertake advanced study and research in their field of specialisation. During the year 1983-84, the Commission awarded 61 research fellowships. Under this category, students are given fellowship* @ Rs. 700 p.m. and a contingency grant of Rs. 3,000 p.m. The value of the fellowship is enhanced to Rs. 800 p.m. after a period of two years, on the basis of the assessment report of the work done and the recommendation of the supervisor.

8.10 Border Hill Areas Scholarships: In order to promote channels of academic communication between students of the border hill areas and the rest of the country, the Commission has instituted 25 scholarships for meritorious postgraduate students belonging to Scheduled Castes/Scheduled Tribes and Backward Communities of these regions. During the year 1983-84, the Commission awarded 26 scholarships to the meritorious students of this region.

8.11 Scholarships for Master of Computer Application Course: The Commission has agreed to award scholarships of the value of Rs. 400 p.m. to final year students of Master of Computer Application Course provided they have passed the second year examination in the first attempt with at least 60 per cent marks.

8.12 Award of Junior Research Fellowships/Research Associateships to Students from Developing Countries: The Commission is also providing assistance to the students of developing countries by awarding five research associateships and 10 junior research fellowships in science, humanities and social sciences every year. During the year 1983-84, the Commission made 23 awards i.e. 14 junior research fellowships and 9 research associateships.

8.13 Bursary Scheme: The Commission in July, 1983, accepted the recommendation made by a Committee and agreed to introduce the bursary scheme for students belonging to Scheduled Caste/Tribe communities.

*The value of the fellowships has been revised since.

It was agreed that a beginning could be made by introducing the bursary scheme with 100 scholarships instituted to identify meritorious students of Scheduled Caste/Tribe categories at the end of their 12th class examination and give them the best education and training in various branches of learning.

It was agreed that the order of merit list of the National Council of Educational Research and Training (NCERT) for the National Talent Search Examination, beginning from 1983-84, may be the basis for drawing up the selection list of the candidates belonging to Scheduled Caste/Tribe categories under the bursary scheme. These candidates would be just below those selected by the NCERT.

During the year 1983-84, the NCERT could supply three such names, in whose favour, awards are being issued.

8.14 Construction of Hostels: The Commission has been giving a high priority for the construction of hostels for students in universities and colleges in view of the fact that improvement of the conditions in which students live and work has an important bearing on their academic performance. Provision of hostel facilities is one of the important items included in the general programme of development of universities and colleges.

In the interest of social justice, the Commission has decided that all universities assisted by it to construct students' hostels would be required to reserve 20 per cent of the seats in such hostels for students belonging to Scheduled Castes and Scheduled Tribes. The Commission has also decided that its assistance for construction of hostels in backward areas would be at the rate of 75 per cent of the total expenditure as against 50 per cent available for other areas. In order to keep the cost of construction low, the Commission has been encouraging the construction of dormitories and/or double or triple seated rooms rather than single seated rooms in the hostels.

During 1983-84, a grant of Rs. 165.16 lakhs was paid to universities and colleges towards the construction of hostels.

8.15 Improvement of facilities and training for sports in the universities and colleges: The Commission in June, 1983 considered the recommendations made by the Working Group appointed by it to suggest steps to be taken to improve the facilities and training for sports in universities and colleges and while generally accepting the recommendations made by the Working Group, agreed that a perspective plan should be prepared with the help of a committee or Working Group to indicate the nature of developments over a period of 10-15 years and it may be finalised after circulation to the universities. The Government of India, Department of Sports has also been requested to make available a sum of Rs. 5 crores for the development of sports facilities in the universities and colleges for the remaining period of the Sixth plan.

The Department of Sports has, however, expressed its inability to provide funds of the magnitude desired by the Commission and accordingly a Committee has been constituted to prepare the details of the programme in the Seventh plan. The Commission with the help of a Committee, is also working out the details of a three year degree course in physical education (including sports, thus enabling excellence in sports and athletics to be cultivated in its wider concept so that it will be different from physical education courses presently offered by the colleges of physical education. The Committee has constituted a sub-committee to work out the detailed courses of study in this regard. The sub-committee has finalized its report but the recommendations of the Committee thereon are awaited.

SECTION 9

Cultural Exchange Programme and International Collaboration

9.01 Cultural Exchange Programme: The Commission continued to implement the various items under the Cultural Exchange Programme assigned to it by the Government of India from time to time. These programmes involve exchange of teachers, development of bilateral academic links between institutions of higher education, joint seminars, scholarships and fellowships and assignment of foreign language teachers to universities in India. During the year 1983-84, 65 Indian teachers were able to undertake visits abroad under these programmes. The corresponding number of scholars coming to India under these programmes during the same period is 66. The Commission feels that such visits are very useful to the Indian teachers in keeping them abreast of latest developments in teaching and research as also to enable them to project the progress made by the Indian universities' institutions in various fields.

The Commission has been emphasising the development of discipline based links in specified areas between institutions of higher education in India and those in foreign countries. The areas for bilateral collaboration have been identified under some of the cultural exchange programmes, viz., the Union of Soviet Socialist Republics, Federal Republic of Germany, German Democratic Republic, Bulgaria, Czechoslovakia, Hungary, Poland, France, Yugoslavia etc. and efforts are being made to identify areas of collaboration with other countries. These bilateral programmes involve exchange of faculty, joint research, seminars and exchange of literature. The work relating to the assignment of Russian language teachers from USSR to universities in India in terms of the provisions of the Indo-Soviet Cultural Exchange Programme has been transferred to the Commission. This had hitherto been done by the Ministry of Education and Culture. The Commission has already sent its requirements for the assignment of Russian language teachers to the universities to the Union of Soviet Socialist Republics side. The procedure for the assignment of Russian language teachers has been streamlined.

9.02 Delegations (i) During the year under report, the Commission hosted the visit of a three-member delegation of Vice-Chancellors of Australian universities headed by Professor David Garo, Chairman of the Vice-Chancellors' Committee. Other members of the delegation were, Professor Lindsay Michael Birt and Professor B.G. Wilson.

This delegation visited a number of universities in India and held discussions with a group of academics in different disciplines with a view to identifying areas and institutions for bilateral collaboration between Austra-

lian universities and institutions of higher education in India under the provisions of the Indo-Australian Cultural Exchange Programme. A tentative list of areas has been agreed to and has been sent to the Australian side for their views which are awaited.

(ii) The Commission also hosted the visit of a two-member delegation from Dar-e-Salaam University, Tanzania comprising Professor G.R.V. MMAR, Chief Academic Officer and Dr. K.J. Karegero, head of the department of Agricultural Education. The delegation visited a few institutions in India and also had discussions with officers of the Government of India with regard to recruitment of certain categories of personnel for the university.

(iii) A three-member Soviet delegation visited India for participation in a seminar on Russian language and literature at the Central Institute of English and Foreign Languages, Hyderabad. After the seminar, two members of the Soviet team held detailed discussions with the Commission's officers and a group of teachers of Russian language and literature in Indian universities to consider ways and means of developing further teaching and research in Russian language and literature in Indian universities. The recommendations made as a result of the discussions are being implemented.

(iv) A three-member team of Soviet scholars visited India to participate in the national symposium on "Problems of Comparative Studies of Slavic Languages" from 27-29th February, 1984 organised by Delhi University.

(v) A two-member Soviet delegation visited India for participation in the 58th seminar of the Indian Philosophy Congress at Waltair from 1-4 January, 1984.

9.03 Joint Seminars: (i) An Indo-Canadian Workshop on "Educational Technology" was organised from 9th to 12th May, 1983 by Jamia Millia Islamia in which a team of nine Canadian scholars participated.

(ii) An Indo-Canadian Workshop in "History" was organised by Delhi University from December 6-12, 1983 in which four Canadian and about 100 Indian scholars from Delhi and outside participated.

(iii) An Indo-Hungarian Round Table on "Economics" was organised by Gokhale Institute of Politics and Economics, Pune at Lonavala in March, 1984. A three-member Hungarian Economists team participated in the symposium. Thereafter, they visited a few centres/organisations which are doing work in areas relating to the topics of discussion in the symposium.

(iv) A joint Indo-Soviet Seminar on "Urbanisation in the process of migration" slated for February, 1984 has been shifted to September, 1984.

(v) A joint Indo-Soviet Seminar on "Iron Age and State Formations upto 300 B.C." is proposed to be organised at Ashkabad (Union of Soviet Socialist Republics) in September, 1984.

(vi) It has been decided to hold a conference of Vice-Chancellors of universities located in Asian countries and Pacific region for four-five days in October, 1985.

9.04 Fellowships and Scholarships: (i) The Commission nominated teachers for the twelve German Academic Exchange Service Fellowships. These fellowships are offered every year to teachers working in universities and colleges, in natural sciences (physics, chemistry, zoology and botany), mathematics, geology, and German language and literature.

(ii) The Commission utilised the offer of 22 scholarships and ten fellowships from the Government of France under the Indo-French Cultural Exchange Programme. These scholarships/fellowships are available for the study of French language, literature and civilisation.

(iii) The German Academic Exchange Service offered 16 man months for the award of fellowships to Indian teachers to collect material on their research work on topics related to German culture for a period of three-six months. The Commission nominated three teachers to visit the Federal Republic of Germany but only one teacher was accepted by the Federal Republic of Germany side.

(iv) The German Academic Exchange service offered six short-term scholarships for students of M.A. in German language of Indian universities and three short-term fellowships for teachers of German language. The Commission nominated six students and three teachers for the same.

(v) Five teachers of German language in India visited the German Democratic Republic and participated in German philosophy course in June, 1983.

(vi) Two teachers participated in the International Summer Seminar on 'Economics' held in Berlin (German Democratic Republic) in June, 1983.

9.05 Development of Canadian Studies in Indian Universities: Under programmes of the Shastri Indo-Canadian Institute, it has been agreed to develop Canadian studies in the following universities in the discipline indicated against each.

(i) Delhi and Bombay University	History
(ii) Poona University	Sociology
(iii) Presidency College, Calcutta	Economics
(iv) Rajasthan University, Jaipur	Political Science
(v) Central Institute of English and Foreign Languages, Hyderabad	Literature Resource Material

The above centres will, in course of time, develop into multi-disciplinary centres for Canadian studies. It has also been decided that for the development of programmes of Canadian studies in these disciplines, the two sides will exchange two scholars annually. The Commission nominated a scholar each from Presidency College, Calcutta and Rajasthan University, Jaipur

to spend a term in Canadian universities to familiarise himself with teaching and research, the intention being that the university to which the scholar belongs would introduce courses and research in the identified area. In addition, it has also been agreed to in principle, that there will be exchange of scholars between India and Canada for a period of two-man months annually effective from 1984-85 for lecture-cum-study, exchange of views and establishing contacts.

9.06 Academic links Interchange Scheme: The Commission has been implementing a programme of collaboration between universities in India and the United Kingdom in identified areas under the Indo-British Universities Collaboration Programme for some time. However, due to cuts in the public expenditure in United Kingdom, the scheme had to be suspended after 1981-82. The British Council had offered another scheme 'Academic Links Interchange Scheme' for collaboration between institutions in the two countries in mutually identified areas. The main purpose of the scheme is to give support for visits which will help establish long-term collaboration links, promote joint research projects, joint publications, curriculum and course development, academic/professional/administrative staff exchange programme. These programmes are primarily for collaborative projects in science, engineering and technology.

On the recommendation of an expert committee, the Commission has identified areas and in consultation with the British Council, the two sides have agreed to develop programmes in about 20 identified areas. Proposals for developing these programmes in other areas are also under consideration in consultation with the British Council. The programme provides for the annual exchange of scholars from identified institutions from the two sides for a period not exceeding 20 weeks each. The Commission has also suggested to the British Council the need for developing links in some areas in the humanities and social sciences. The reaction of the British Council is awaited.

9.07 Indo-US Fellowship Programme: The Commission continued to implement this programme during the current year. Against the 12 fellowships allocated to the Commission for the visit of Indian scholars to the United States of America for post-doctoral research work, the Commission nominated eight scholars for a full term fellowship for ten months and 12 scholars for a short-term visitorship of 13 weeks each. From the American side 22 scholars have visited India (12 for long-term and ten for short-term) against the 15 full-term fellowships available for them during 1983-84. For 1984-85, the American side nominated 46 scholars for full-term and short-term fellowships and visitorships. The nominations have been processed in consultation with the agencies concerned. The Commission has agreed to award 15 full-term fellowships to American scholars under this programme for post-doctoral research work. The American side has proposed to utilise 11 of

Under this scheme a full-term grant of Rs. 2,000/- and Rs. 1,500/- for each month's travel. An Indian's financial assistance to the Indian Institute for Disabled was organized by the SNDT Women's University, Bombay on 11th February, 1984 with the participation of six American academics.

The programme for the exchange of scholars for a total period of 150 man-days under Indo-US Exchange of Scientists' Programme has also been implemented and five scientists from universities have been nominated under this programme. Six American scientists have visited India during the year.

9.08 Commonwealth Academic Staff Fellowships and Scholarships: The Commission has been coordinating with the Commonwealth Scholarship Commission in UK in making nominations for the Commonwealth Academic Staff fellowships and scholarships to enable promising staff members in Indian universities to obtain experience in a university or institution in the United Kingdom. A beginning in this direction was made in the year 1969-70. The Commonwealth Academic Staff fellowships are intended primarily, though not exclusively, to help universities in developing Commonwealth countries to enhance the experience of their academic staff. Though no special areas of study have been identified, the fields of Medicine and Surgery have been excluded as facilities are available under the Commonwealth Medical Awards for the purpose. For the year 1983-84 out of 204 nominations, the UGC recommended 28 for fellowships and 22 for scholarships. The Commonwealth Scholarship Commission in U.K. finally awarded 16 fellowships and 13 scholarships.

9.09 Technical Cooperation Training Awards: Under the above scheme, teachers in universities and colleges in the age group of 25-35 are eligible for consideration. The international travel of the selected candidates is borne by the British Council in U.K. and the UGC pays them first class rail fare from place of duty to the nearest international airport and back. The duration of such awards varies from 3 months to 12 months depending upon the plan of work of the teacher.

The British Council had offered eight slots to the UGC for award to teachers in universities/colleges. For the year 1983-84, the Commission recommended eight teachers and the Ministry of Finance/Ministry of Education finally approved them for awards.

SECTION 10

Adult, Continuing and Extension Education and Distance Learning

10.01 *The Commission has been providing financial assistance to universities and colleges for adult and continuing education and extension programmes with the following objectives and guidelines formulated with the help of a working group.*

- (i) To enable universities to establish the necessary linkage with the community with a view to fostering social change through meaningful relationships and interactions, which are mutually beneficial by offering need-based and relevant educational programmes that may ultimately promote self-reliance.
- (ii) To provide opportunities for disseminating knowledge in all walks of life of different segments of population to enable individuals and groups to fill the gaps in their intellectual growth, professional and technical competence and understanding of contemporary issues.
- (iii) To cater to the felt needs of all sections of society, specially the under-privileged sections in order to secure their effective participation in the development process.
- (iv) To enrich higher education by integrating continuing and adult education programmes and extension work in the system and thus provide opportunities to remove its isolation.
- (v) To expose the faculty and students to field experiences and to sensitize them to societal problems and realities.
- (vi) Faculty and student participation in extension research and action research in selected areas in relation to major problems of development in cooperation with the Government.

10.02 Under the adult and continuing education schemes, the Commission has given priority to the educational needs of the under-privileged sections of the society, such as, women, in particular in rural and slum areas; Scheduled castes and Scheduled tribes; drop-outs; unemployed and out-of-school youth; handicapped workers in the organised and unorganised sectors; teachers teaching primary and secondary classes and handicapped children, university students from under-privileged rural groups and slums.

10.03 The scope of the programmes included under adult education is fairly wide, encompassing as it does removal of illiteracy, post-literacy and follow-up work, population education, family welfare and child care, film clubs, national integration and environmental protection.

10.04 Measures for promoting adult and continuing education were initiated in 1969 when the nature, scope and objectives of these programmes were spelt out by the Commission and universities invited to participate in the activities to make teaching and research more relevant and functional. As these programmes got under way, the Commission took one more step in 1977 and recognised in its policy frame that adult and continuing education was an integral part of teaching. It pointed out that:

“If the university system has to discharge adequately its responsibilities to the entire educational system and to the society as a whole, it must assume extension as the third important responsibility and give it the same status as research and teaching. This is a new and extremely significant area which should be developed on the basis of high priority”.

Within this broad framework of adult education, continuing education and extension, universities and colleges have continued to participate in several schemes during the year under report as detailed in the following paragraphs.

10.05 Programmes of Removal of Adult Illiteracy: With a view to involving more and more students and teachers from universities/colleges in the removal of adult illiteracy particularly in the age group of 15-35, the Commission continued to provide support to the universities/colleges on 100% basis through the following schemes:

- (a) Adult Education and Extension;
- (b) Point No. 16 of the new 20 point programme of the Government of India;
- (c) Resource Centres in Adult Education.

10.06 Adult education and extension programmes were initiated in 1978 and implemented by 68 universities and 705 colleges through 8,790 centres. In September, 1983 these were merged in the scheme of removal of adult illiteracy as per point No. 16 of the new 20 point programme of the Government of India.

10.07 The Commission appointed a working group to review the on-going scheme of adult education and extension and make recommendations for a dynamic programme of removal of adult illiteracy through the involvement of students of universities and colleges. The Working Group recommended that the adult literacy programme through universities may be implemented in two phases; the first phase to cover the period ending 31st March, 1985 and the second phase ending 31st March, 1990. In the first phase, all affiliating type of universities and at least 1,500 colleges will be involved to achieve a

target of 15,000 to 20,000 centres. In the second phase, the number of centres will be raised to at least 50,000 by involving all the universities/colleges in the country in point No. 16 programme. While implementing this and in particular in the first phase, universities/colleges in districts having literacy level below the national average, colleges for women and colleges located in the rural/backward tribal areas will be given priority.

10.08 The Commission has agreed to provide assistance to universities/colleges for these programmes on 100% basis upto 31st March, 1990. Suitable guidelines have also been formulated on the basis of the report of the Working Group for circulation to the universities and formulation of their proposals. Universities have also been asked to ensure effective training of the adult education functionaries for the implementation and monitoring of the programme. As on 31st March, 1984, 48 universities and 1,005 colleges were involved in the programme and 27,410 centres were sanctioned by the Commission.

10.09 Point No. 16 of the new 20 point programme also emphasises the goal of universal elementary education. With this end in view, the Working Group recommended that university/college students from National Social Service as well as others should help in locating the non-school going children and getting them admitted in primary schools or non-formal education centres. They should also organise remedial coaching classes for the needy and underprivileged children.

10.10 For providing effective support in terms of materials, training etc. to the programme of adult education, the Commission continued to provide assistance to the State Resource Centres established at Osmania University and Kashmir University; Regional Resource Centre located at Punjab University and Resource Unit at Sri Venkateswara University for Rayalaseema region of Andhra Pradesh. A committee has been constituted to review the working of these centres.

10.11 Continuing Education and Extension: The Commission continued to provide financial assistance to universities/colleges for their participation in the programmes of continuing education for students as well as members of the community and also to link post-literacy and follow up with continuing education. Under this scheme 14 universities are being assisted as detailed in the UGC Annual Report for 1982-83 (p. 216).

10.12 Adult Education and Extension: This scheme was formulated in 1982 with the following objectives stated in para 10.01.

10.13 While the scheme covers all the groups, universities/colleges have been advised to give priority to programmes for women in particular women from rural areas, Scheduled Castes and Scheduled Tribes, dropouts, unemployed and out-of-school youth, handicapped, workers in unorganised sectors, teachers teaching primary, secondary and handicapped children and university students from under-privileged sections, rural areas and slums.

10.14 Universities/colleges have also been advised to give priority to national programmes, such as, national integration, population education, welfare and child care, environmental protection, science for the masses etc.

During the year under report 33 universities and 18 colleges were assisted under this scheme. Assistance is available upto 31st March, 1990.

10.15 Population Education: With a view to promoting awareness of population problems among students/community, the Commission has taken several steps during the year under report as stated below:

- (i) Circulation of a set of 15 lectures on various aspects of population education for use by universities and colleges.
- (ii) Inclusion of population education in the scheme of restructuring of courses at the undergraduate level in foundation and applied courses.
- (iii) Strengthening of population education at the postgraduate level and provision of support under developmental programmes of the Commission.
- (iv) Assistance to universities and colleges for surveys/research projects on population problems.
- (v) Population education as one of the activities under the programme of adult and continuing education.
- (vi) Setting up of population education clubs for students and the community in general.

10.16 A major activity during the year under report was the establishment of population education clubs in universities/colleges. The objectives of population education clubs are as under:

- (i) to make the student community aware of the dynamics of population and to enable them to understand the determinants and consequences of the population problem.
- (ii) to make the students understand the population policies and programmes of the country and appreciate the need for "Small Family Norm".
- (iii) to educate the community about the implication of rapid population growth at the family and national levels.

Guidelines have been finalised and circulated to universities for organising population education activities for students and adult learners.

Assistance on 100% basis will be provided to universities/colleges under this scheme upto 31st March, 1990. It is expected that by 31st March 1990 all universities/colleges in the country will be involved in this programme.

10.17 Planning Forums: The Commission continued to provide assistance to universities and colleges for instituting planning forums on 100% basis. The scheme aims to develop plan consciousness amongst the educated youth.

During the year under report 78 universities, and 427 colleges were assisted under this scheme.

10.18 Women's Studies: The Commission is taking special interest in women's studies and in strengthening the data base for better analysis of survey and research findings and has agreed to extend financial support to universities undertaking well-defined research projects on these items as also for development of curriculum and extension activities. Proposals have been invited from universities in this regard which are being examined with the help of an Expert Group.

10.19. The Ford Foundation has also made an offer of \$ 1,00,000 to the Commission to be utilised for support towards library collections on Women's studies in a limited number of universities and colleges.

10.20 Film Clubs: The Commission had appointed a Committee to examine suitable guidelines for the establishment of film clubs in universities and colleges. As recommended by the Committee, the objectives of the Film Societies in universities/colleges would be as under:—

- (i) To increase the awareness of film as a modern art form and of the cinema as 20th century medium of social communication and education by exposing students to international and Indian film classics of various genres in a systematic manner,
- (ii) to organise discussions, symposia, lectures and courses on any aspect of film appreciation in support of the promotion of film culture on the campus.
- (iii) to attempt to relate film as a subject with other subjects which are being studied on the campus, and with fine arts, and
- (iv) to expand the understanding of the relationship of the cinema with the needs of individual growth and with social development.

10.21 Coaching classes for Minority Communities: The Commission continued to provide assistance to Aligarh Muslim University and Jamia Millia Islamia for conducting coaching classes for competitive examinations of

students belonging to the minority communities. The Commission further agreed that such classes be organised by other universities also and with this end in view, the universities of Jammu, Kashmir, Bangalore, Osmania, Calicut, Lucknow, Patna and Gauhati have been requested to send suitable proposals for the consideration of the Commission.

10.22 Training and Orientation Centres of National Social Service.: The Department of Sports in the Government of India has been providing earmarked funds to the Commission for disbursement to universities where centres of training and orientation for National Social Service officers are located. During the year under report, the Commission continued to give grants to these universities for their training and orientation programmes.

10.23 Rural Development: The Commission is of the view that it would be highly desirable to encourage the participation of universities and colleges and particularly those located in rural areas in local developmental work and in extension work on socially important areas, such as, alternative source of energy, soil and water conservation, co-development, aforestation, adult education etc. The Commission appointed a Committee to work out the relevant details. Its recommendations on the role of universities in rural development in regard to the socio-economic, scientific and technological aspects of integrated rural development have been circulated to the universities for formulating suitable projects. These are being processed with the help of a Committee.

10.24 Distance Education/Correspondence Courses: The Commission has been supporting the programmes of distance education/correspondence courses with a view to providing a new stream of education to enable a large number of persons with necessary aptitude to acquire further knowledge and improve their professional competence. Distance education/correspondence courses is essentially based on the supply of instructional material for home study, but has to be supported and supplemented by personal contact programmes, student responses, library facilities, study centres, radio programmes, audio-visual aids etc.

The objectives of the scheme are (a) to meet the increasing demand for education by utilising alternative systems of delivery (b) to bring about equalization of opportunity by providing facilities in backward regions, as also to the weaker sections of the community who have to take up jobs owing to their pecuniary circumstances and for women many of whom still find it difficult to go to a college as they belong to tradition ridden families and communities. Distance education, which is available on an all-India level, is also an end towards national integration as it exposes students to the cultures of distant regions through personal contact programmes and other forms of interaction.

A standing Committee on Distane Education has been constituted to advise the Commission regarding various steps to be taken for the successful implementation of the programme of distance education in the universities. The Committee drew up a set of guidelines to improve the functioning of distance education institutes. These guidelines were approved by the Commission and circulated to the universities. The guidelines deal with the following aspects of distance education: (i) Objectives of distance education courses; (ii) setting up of schools/institutes; (iii) criterjon for admission (iv) duration of courses (v) preparation of instructional material; (vi) despatch of lessons/reading material (vii) students response sheets; (viii) study centres; (ix) personal contact programme; (x) Staff; (xi) Norms of work; (xii) library services, and financial assistance by the UGC.

The Commission is providing assistance towards staff, personal contact programmes, study centres, preparation of lessons and library facilities under the programme to 22 universities and one institution deemed to be university. These are Allahabad, Andhra, Annamalai, Bhopal, Bombay, Delhi, Himachal Pradesh, Jammu, Kashmir, Kerala, Madurai Kamraj, Meerut, Mysore, Panjab, Patna, Punjabi, Rajasthan, S.N.D.T. Women's, Sri Venkateswara, Utkal, Osmania, Udaipur and Central Institute of English and Foreign Languages, Hyderabad. A statement giving the present position of universities offering correspondence courses, their enrolment etc. is at Appendix XXI.

The Commission has enhanced the grant for distance education at the undergraduate level from Rs. one lakh to Rs. 1.5 lakhs per annum for a period of five years. At the postgraduate level, the grant has been increased from Rs. one lakh to Rs. 1.5 lakh per annum per subject for a period of five years.

Keeping in view the problems and difficulties faced by the schools/ institutions of distance education in regard to their day-to-day functioning, the Commission assigned a project for the appraisal of these programmes. The guidelines for distance education/correspondence courses will be reviewed in the light of the report which is expected shortly.

SECTION 11

Facilities for Scheduled Castes and Scheduled Tribes

11.01 An important objective underlining the policies and programmes of the Commission for the development of higher education is to give equal opportunities, specially to those belonging to the weaker sections of the society. The Commission has not only drawn up a sub-plan for the purpose as an integral part of its Sixth five-year plan programmes but also created a special cell to oversee the progress of implementation of Government of India's orders in this regard as well as the programmes initiated by the Commission from time to time.

11.02 During the period under report, the Commission continued its efforts to ensure the progress of the implementation of Government of India's orders regarding reservation of seats for various courses of studies, recruitment to teaching (upto lecturer's post) and non-teaching posts and posts to be filled by promotion and other incentives, schemes/programmes launched by the Commission from time to time for the uplift of Scheduled Caste and Scheduled Tribe communities.

11.03 Sub-Plan/Special Component Plan: The Commission on acceptance of the recommendations made by the Standing Committee on Facilities for Scheduled Castes and Scheduled Tribes regarding sub-plan for Scheduled Tribes and Special Component Plan for Scheduled Castes drawn up by its working group as a part of Commission's Sixth five-year plan programme, provided an outlay of Rs. 814.25 lakhs, for the sub-plan for Scheduled Tribes and Rs. 1524.50 lakhs for special component plan for Scheduled Caste for the annual plan of 1983-84. The programmes/schemes included in the sub-plan and special component plan for which the outlays have been made mostly consist of existing schemes of the Commission modified to the extent suited to the needs of Scheduled Castes and Scheduled Tribes as also the new schemes.

11.04 Special Cells in Universities: In view of the importance of the programmes for Scheduled Castes and Scheduled Tribes and need to accelerate these programmes in the context of the 20 point programme, the Commission on acceptance of the recommendations made by its Standing Committee has decided to provide assistance on cent per cent basis to the universities during the current plan period for the creation of special cells as a measure for strengthening the implementation machinery for planning, evaluation and monitoring the programmes for Scheduled Caste and Scheduled Tribe communities. So far during 1983-84 the Commission has accepted proposals of 59 universities for the setting up of special cells.

11.05 Preparatory Remedial Courses: On the basis of the recommendation made by the Standing Committee, the Commission has introduced a scheme relating to preparatory training, remedial teaching and special coaching, with a view to removing the deficiencies of the students belonging to Scheduled Caste and Scheduled Tribe communities at their earlier stages of their education, deficiencies to follow the existing courses of studies and also to improve their performance in languages, mathematics, science subjects and in other identified areas. The universities have been requested to take immediate steps to organise these courses by all university departments including Centres of Advanced Studies/Departments of Special Assistance, College Science Improvement Programme (COSIP) and College Humanities and Social Science Improvement Programme (COHSSIP) and all colleges eligible for Commission's assistance. Depending upon the courses of studies a college may start two to three or more units. The Commission has agreed to provide for this purpose a grant not exceeding Rs. 12,500 per annum per unit.

11.06 Bursary Scheme: The Commission has, on the recommendations of its Standing Committee on facilities for Scheduled Castes and Scheduled Tribes, constituted a committee to evolve mechanics for the introduction of a bursary scheme for students belonging to Scheduled Caste and Scheduled Tribe communities under this scheme, the Commission would award every year 115 scholarships beginning with 1983-84 to meritorious students at the end of their 12th stage examination and would place them in identified prestigious institutions/colleges. The selection of such students would be made by the Commission on the basis of the merit list prepared by the National Council of Educational Research and Training for their National Talent Search Examination.

11.07 Establishment of Coaching Centres for Scheduled Caste/Scheduled Tribe students and institutional unit for Colleges with high proportional enrolment of SC/ST: In the sub-plan for Scheduled Tribes and Special Component plan for Scheduled Castes formulated by the Commission as a part of the Sixth-five year plan, it was recommended, *inter alia* that it was necessary to open a large number of coaching centres so that Scheduled Caste and Scheduled Tribe students could be prepared for all competitive examinations not only for various selections for placements but also for admission to professional, technical and para-professional courses. A committee was constituted to consider the feasibility of the scheme for setting up of coaching centres in the universities.

The Committee felt that it was necessary to identify in the first instance about 50 colleges where there was a sizeable proportion of Scheduled Caste/Scheduled Tribe students, the committee also opined that apart from the total

number of Scheduled Caste and Scheduled Tribe students, it would be imperative to take into consideration the number of Scheduled Caste and Scheduled Tribe students separately, besides the total enrolment in the colleges. This is in view of the fact that the distribution of Scheduled Caste and Scheduled Tribe students in the country is not uniform. Once such colleges are identified and selected by the specially constituted committees for on-the-spot study on the basis of physical facilities and other infrastructure created in such institutions, special assistance could be provided to these institutions to raise the level of their performance. The committee emphasised that in fact these colleges might be approached with a basket of schemes like the schemes for the development of education at undergraduate and postgraduate levels, College Science Improvement Programme (COSIP) and College Humanities and Social Science Improvement Programme (COHSSIP) and remedial courses plus new inputs inclusive of assistance that may be required for starting coaching classes/centres to coach Scheduled Caste/Scheduled Tribe students among other things for entrance test examinations for professional technical and para-professional courses.

11.08 Preparation of Teaching Materials: The Commission has also constituted a committee to prepare suitable teaching material for teachers under teacher training and orientation programme for Scheduled Castes and Scheduled Tribes. The report of the committee is awaited.

11.09 Reservations of Fellowships/Scholarships: (i) Out of the total number of junior research fellowships allotted to the universities, 10% are reserved for Scheduled Caste/Tribe candidates. In addition to this, 56 junior research fellowships have been awarded directly by the Commission exclusively for Scheduled Caste/Tribe candidates in science, humanities and social sciences during the period under review. This was possible as lesser number of applications were received for the award of research associateships reserved for Scheduled Caste/Tribe candidates.

(ii) *Research Associateships:* Out of 150 research associateships awarded by the Commission on all-India basis, 10% are reserved for Scheduled Castes/Tribes. In addition to this, the Commission has awarded three research associateships exclusively to Scheduled Caste/Tribe students.

(iii) *Postgraduate Scholarships for candidates belonging to Scheduled Tribes of Border Areas:* The Commission has instituted and awarded 25 scholarships during the period under review to students belonging to the Scheduled Tribes of border hill areas for undertaking postgraduate studies in science, humanities and social sciences.

(iv) *Research Fellowships in Engineering and Technology:* 10% of 60 research fellowships are reserved for award to Scheduled Caste/Tribe candidates in engineering and technology.

11.10 The Commission appointed a committee to work out the details of the scheme relating to the setting up of coaching centres in the universities for Scheduled Caste/Scheduled Tribe students. The report of the committee has been accepted. Institutions for special development assistance are being identified.

11.11 The Commission has selected college teachers belonging to Scheduled Castes and Scheduled Tribes for the award of 50 teacher fellowships for doing M.Phil. and Ph.D. in Science and Humanities including Social Sciences for the year 1984-85. These fellowships are of two types: 30 fellowships are of short-term duration i.e. one year for M.Phil. course and 20 fellowships are of long-term duration, i.e. three years extendable by one more year for Ph.D. studies.

Under this scheme, the selected teachers are entitled to living expenses allowance at the rate of Rs. 500 per month provided the place of their research is 40 kilometers, away from the place of duty. A contingency grant of Rs. 1,500 per annum for M.Phil. and Rs. 3,000 per annum for Ph.D. studies is also admissible. The salary of the substitute lecturer for the duration of teacher fellowship is paid by the Commission. Only those college teachers who are permanent and are below the age of 45 years (50 years in the case of lady lecturers) with at least second class Master's degree are eligible to apply for these fellowships.

11.12 Reservation in the U.G.C. office: Efforts were continued during the year to give due representation to the reserved categories of Scheduled Castes and Scheduled Tribes and to make good the short-fall wherever existing, in the office of the Commission in accordance with the orders issued by the Government of India on the subject.

The following officials belonging to the reserved categories of Scheduled Castes and Scheduled Tribes were appointed/promoted during the year under report:

Sl. No.	Cadre	Appointment made by direct recruitment		Post filled by promotion	
		Scheduled Caste	Scheduled Tribe	Scheduled Caste	Scheduled Tribe
1.	Junior Statistical Officer	—	—	1	—
2.	Section Officer	—	—	2	—
3.	Statistical Assistant	1	—	—	—
4.	Lower Division Clerk	6	—	—	—
5.	Selection Grade Daftri	—	—	—	1
6.	Chowkidar	—	1	—	—
7.	Safaiwala	3	—	—	—

De-reservation was resorted to in the following cases due to non-availability of eligible qualified candidates.

<i>Cadre</i>	<i>Appointment by direct recruitment</i>		<i>Post filled by promotion</i>	
	<i>Scheduled Caste</i>	<i>Scheduled Tribe</i>	<i>Scheduled Caste</i>	<i>Scheduled Tribe</i>
Selection Grade Staff Car Driver	—	—	1	—

Necessary action has been initiated to fill the carried forward posts in various cadres to the extent possible by candidates belonging to the respective reserved categories as per Government of India orders on the subject.

SECTION 12

Higher Education and Women

12.01 Women's education has always been regarded as a key factor in the development of society, in the transformation of character and value system and in the mobilization and utilization of all available human resources. It is a well-known fact that the potentialities of a society cannot be developed fully unless women participate in the economic, social and political activities as equal partners and it is in this that the education of women plays a significant part.

12.02 It is the considered view of the Commission that the plan for educational development of women should take into account the existing imbalances and variations in regional/sectional attitudes towards women's education. The Commission has also held the view that opportunities of vocational training and employment should all be open to women, as they are equal to men. Further, it would be necessary to undertake special programmes and to provide special assistance for women's institutions in order to bring about equality of educational opportunities to benefit the majority of women.

12.03 In response to the needs of the society and the demands of the public and private sectors, there has been a spectacular growth in the number of women enrolling themselves for higher educational institutions and also going in for diversified courses, including professional subjects requiring intensive practical training, laboratory work, field work etc. In the past, women students were drawn from the elite groups and they often had to face prejudices and opposition from family members and society. This is no longer so and women can now pursue their higher studies not only in co-educational institutions but in other institutions as well. They also participate fully in all educational and cultural activities. Their performance in university examinations has also been highly satisfactory from the quantitative as well as qualitative point of view.

12.04 Growth of Enrolment: There has been a spectacular growth in the number of women in institutions of higher education as shown in Table 12.1.

It will be seen from the table that during the past thirty years or so, the enrolment of women has gone up by more than twenty times while the proportion of women to men has increased about threefold during this period.

12.05 Table 12.2 shows the enrolment of women as a proportion of total enrolment during the period 1971-72 to 1983-84. It will be seen that enrolment

Table 12.1

	1950 -51	1955 -56	1960 -61	1965 -66	1975 -76	1980 -81	1981 -82	1982 -83	1983 -84*
Total (Enrolment in thousand)	40	84	150	271	595	749	817	880	977
No. of women per hundred men	14	17	23	24	33	37	38	39	41

*Estimated.

of women as a percentage of total enrolment has increased progressively from 22.7 per cent in 1971-72 to 24.5 per cent in 1975-76, 27.2 per cent in 1980-81 and 29.1 per cent in 1983-84.

Table 12.2

Total enrolment and enrolment of women

Year	Total Enrolment	Women Enrolled	Percentage of women
1971-72	20,65,041	4,68,696	22.7
1973-74	22,34,385	5,20,825	23.3
1974-75	23,66,541	5,53,009	23.4
1975-76	24,26,109	5,95,162	24.5
1976-77	24,31,563	6,27,346	25.8
1979-80	26,48,579	7,89,042	26.0
1980-81	27,52,437	7,48,525	27.2
1981-82	29,52,066	8,16,704	27.7
1982-83	31,33,093	8,80,156	28.1
1983-84*	33,59,323	9,76,795	29.1

*Estimated.

12.06 Women's Colleges: Table 12.3 shows the number of colleges meant exclusively for women. This number has gone up by nearly 33 per cent over the period 1974-75 to 1983-84. In absolute terms, the number increased from 506 in 1974-75 to 674 in 1983-84.

Table 12.3

<i>Year</i>	<i>Number of Colleges for Women only</i>
1974-75	506
1975-76	528
1976-77	543
1979-80	577
1980-81	609
1981-82	624
1982-83	647
1983-84	674*

12.07 State-wise distribution: State-wise distribution of the enrolment of women for the years 1979-80 to 1983-84 is given in Appendix XXIV. The enrolment of women as a percentage of total enrolment has gone up in 1983-84 as compared to 1982-83 in all the states except the States of Assam, Haryana, Orissa, Punjab, Tamil Nadu and West Bengal. During the year, the proportion of women to total enrolment was 49.6 per cent in Kerala followed by the Union territory of Delhi (42.5), Jammu and Kashmir (42.3) and Punjab (41.6). The proportion was less than 20 per cent in Bihar and Orissa.

12.08 Stage-wise distribution: Stage-wise enrolment of women is given in Appendix XXV. During 1971-72 to 1983-84 the enrolment of women at the undergraduate level showed a consistent upward trend. Women enrolment at the research level as a percentage of total research enrolment also increased upon 1982-83 but declined in 1983-84 though not in absolute terms. The enrolment of women at the postgraduate level, which had been declining in the earlier years, showed a perceptible improvement after 1974-75. The percentage of women enrolled at the diploma/certificate level, which was constantly on the decline since 1975-76 picked up substantially in 1982-83 and remained at that level in 1983-84. The percentage of women enrolment at the graduate, postgraduate and research levels was 29.0, 30.8 and 26.3 respectively during 1983-84.

12.09 Faculty-wise distribution: Faculty-wise distribution of the enrolment of women is given in Appendix XXVI. There was an increase in women enrolment as a percentage of total enrolment in all the faculties except 'others' constituting physical education, fine arts etc. In terms of overall

*Provisional.

increase in women enrolment as a percentage of total enrolment during 1971-72 — 1983-84. The faculty of commerce registered the maximum increase from 3.6 per cent in 1971-72 to 15.3 in 1983-84. In the year 1983-84 it was the faculty of education which recorded the maximum percentage increase to total enrolment. Women enrolment as a percentage of total enrolment maintained a steady trend in all the faculties during 1971-72 to 1983-84 except the faculty of medicine in which it showed a decline upto 1975-76 and thereafter picked up to maintain its upward trend. However, a declining trend was observed in the percentage of women enrolled to total enrolment in 1983-84 as compared to 1982-83 in the faculties of Commerce, Engg./Tech. and Vet. Science. The enrolment of women as a percentage of total enrolment during 1983-84 was 59.3 in education, followed by arts (42.0), science (29.8), medicine (28.4) and commerce (15.3).

12.10 The participation of women in research effort in the universities has increased considerably with the result that presently a number of major and minor research projects funded by the UGC and other agencies have been taken up by women, as principal investigators and research staff on projects. The number of women selected in faculty improvement programmes and for award of research fellowships, research associateships, national associateships and other faculty awards of the UGC has also increased in the past few years.

The concern of the Commission for promoting women's education is reflected by the fact that in the case of women's colleges, the sharing basis for construction of hostels is 75 (UGC): 25 (Colleges/state governments) as against 50:50 for other colleges. Similarly as part of general development, the condition regarding assistance from the Commission has been relaxed for women's colleges which become eligible for assistance upto a ceiling of rupees four lakhs with a student enrolment of 200 to 600 in the three-year degree course. The corresponding eligibility condition for other colleges is student enrolment of 300 to 600*.

12.11 Special Courses for Women: The Commission has approved the proposals of the S.N.D.T. Women's University of Bombay for conducting postgraduate diploma courses in new fields like banking, taxation laws, travel and tourism and cancer nursing and rehabilitation. The university has already started diploma courses in banking and travel and tourism on experimental basis.

These diploma courses have been prepared in accordance with the guidelines by the University Grants Commission for restructuring of courses at the graduate and postgraduate levels.

*The Commission has now relaxed the maximum age-limit for women candidates by ten years for the award of research fellowships, teacher fellowships and research associateships. At least 30 per cent of research fellowships are to be awarded to women candidates.



While the women students after passing the diploma course in banking will have opening for employment in commercial and cooperative banks and financial institutions, those with diploma in taxation laws will be able to join banks, tax consultants offices and different accounts and finance departments under the Government and in large commercial houses. The diploma course in travel and tourism will equip the women graduates to work in tourism organisations and travel agencies.

The diploma courses in cancer nursing and rehabilitation will not only meet the need for care of this serious disease but will also create social awareness for it. The S.N.D.T. Women's University will utilise the necessary infrastructure already existing in the Leelabai Thakersey College of Nursing to undertake the proposed diploma course as a pilot project. It will also depend upon the Tata Memorial Cancer Hospital and other cancer units of the hospitals in Bombay which have clinical experience.

Professor S.K. Khanna
Secretary

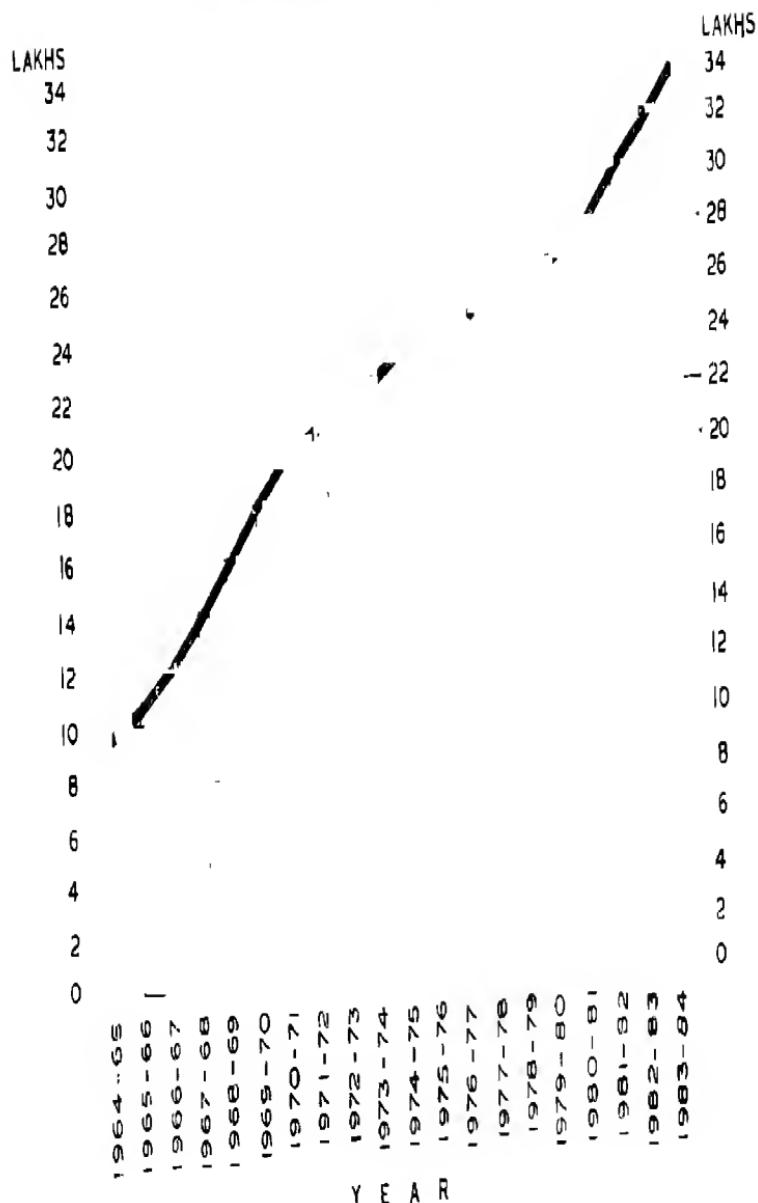
Dr. (Mrs.) Madhuri R. Shah
Chairman

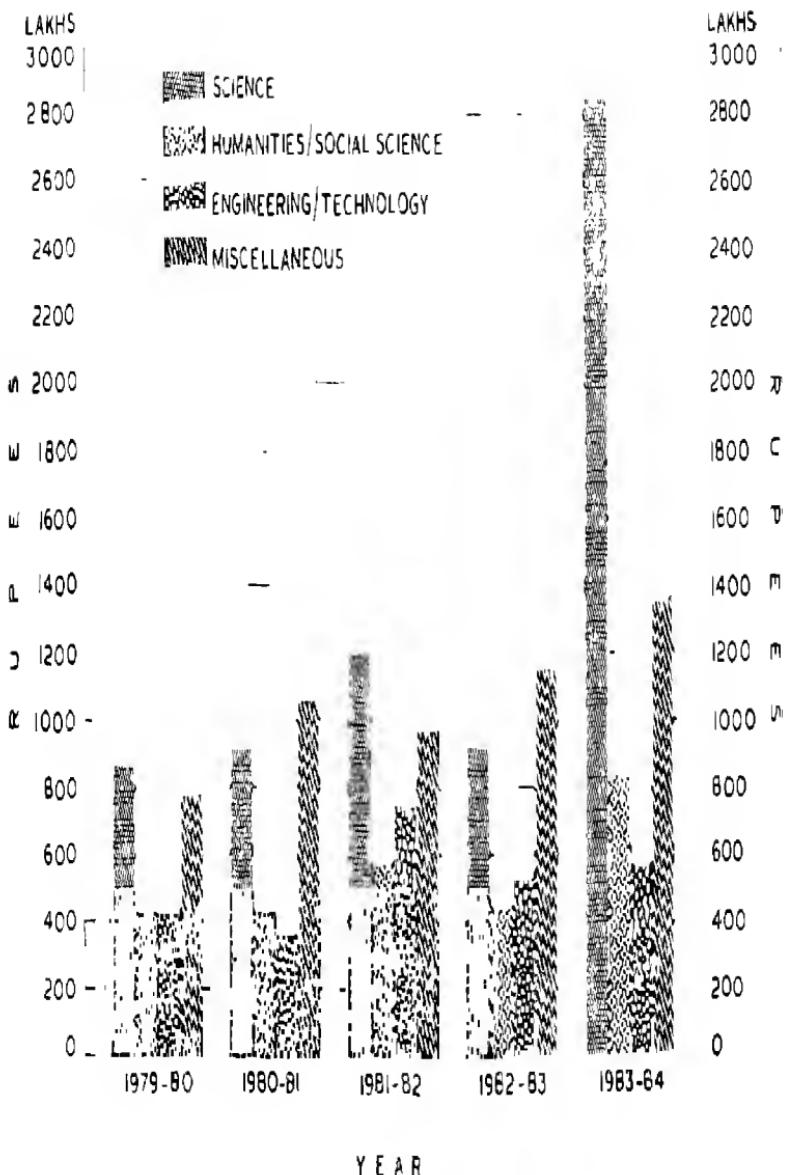
Dr. Rais Ahmed
Vice-Chairman

Members
Mrs. Serla Grewal
Professor Anita Banerji
Professor R.C. Mehrotra
Dr. Ramesh Mohan
Shri Kireet Joshi
Dr. B.C. Parekh
Dr. V.C. Kulandaiswamy
Shri R. Ganapati
Professor H.C. Khare
Mr. Justice M.H. Beg

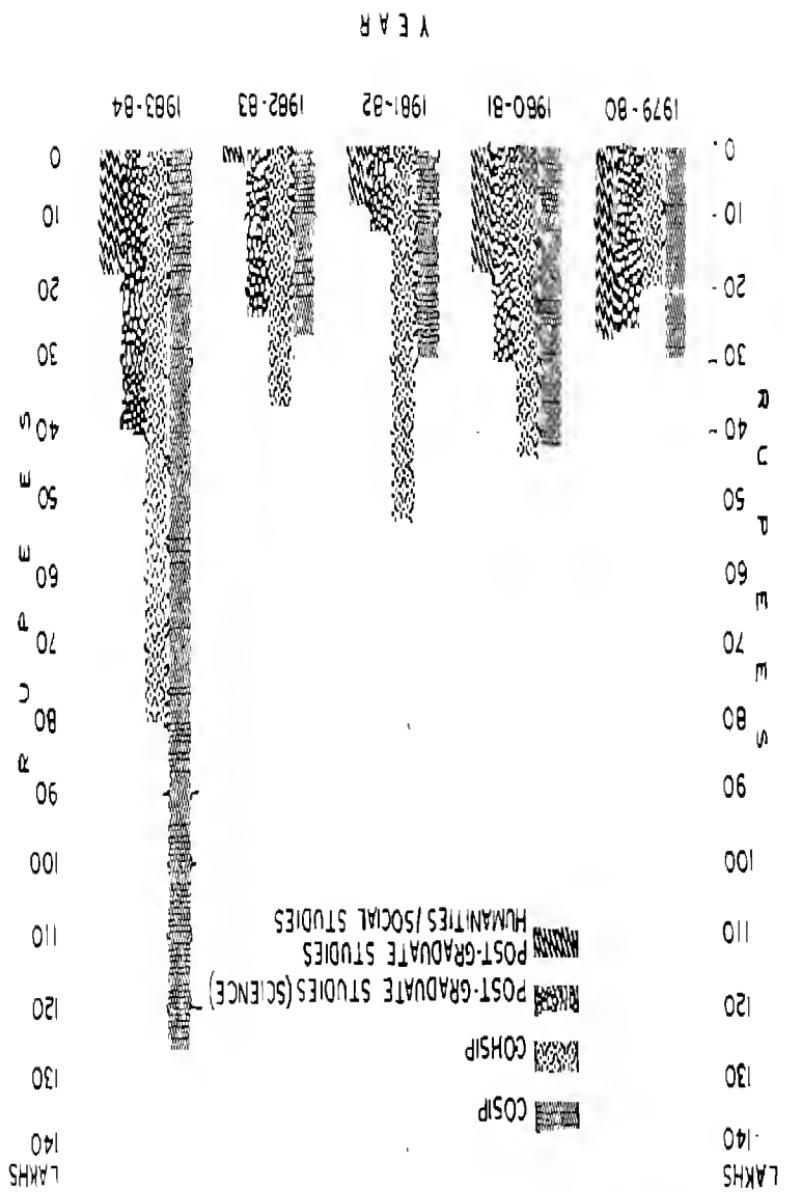
ILLUSTRATIONS

1. Growth of Student Enrolment (University Level) 1964-65 to 1983-84
 (Section 1)





2. Grants for the Development of Universities: 1979-80 to 1983-84
(Section 3)

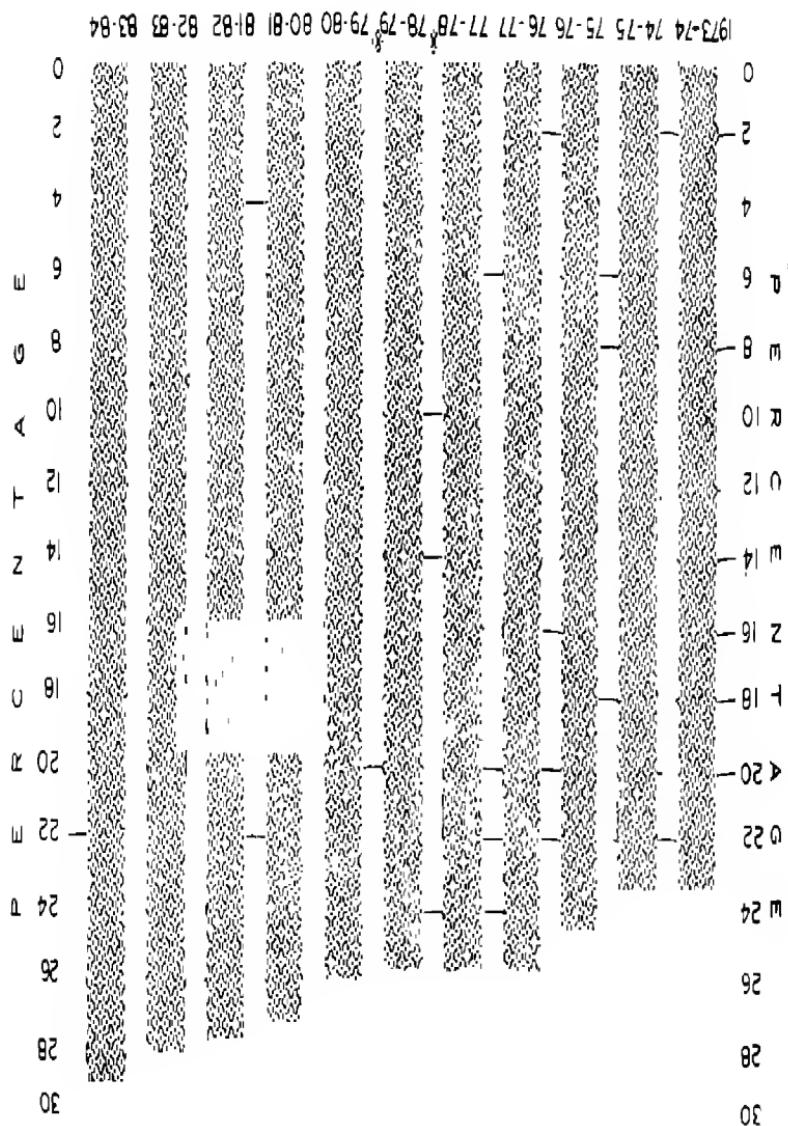


3. Grants paid to Colleges for Special Programmes: 1979-80 to 1983-84
(Scale: 4)

(Section 12)

4. Percentage of Woman Mortal (ed: 1973-74 to 1983-84)

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APPENDIX I

List of Universities and Institutions Deemed to be Universities in India 1983-84

<i>Sl. No.</i>	<i>Name of the University/ Institution</i>	<i>Year of establishment</i>
1.	Calcutta	1857
2.	Bombay	1857
3.	Madras	1857
4.	Allahabad	1887
5.	Banaras	1916
6.	Mysore	1916
7.	Patna	1917
8.	Osmania	1918
9.	Aligarh	1921
10.	Lucknow	1921
11.	Delhi	1922
12.	Nagpur	1923
13.	Andhra	1926
14.	Agra	1927
15.	Annamalai	1929
16.	Kerala	1937
17.	Utkal	1943
18.	Dr. Hari Singh Gour	1946
19.	Rajasthan	1947
20.	Punjab	1947
21.	Gauhati	1948
22.	Kashmir	1949
23.	Roorkee	1949
24.	Poona	1949
25.	M.S. University of Baroda	1949
26.	Karnatak	1949
27.	Gujarat	1950
28.	S N.D.T. Women's	1951
29.	Visva-Bharati	1951
30.	Bihar	1952
31.	Sri Venkateswara	1954
32.	Sardar Patel	1955
33.	Jadavpur	1955
34.	Kurukshestra	1956
35.	Indira Kala Sangeet	1956
36.	Vikrami	1957
37.	Gorakhpur	1957
38.	Rani Durgavati	1957
39.	Sampurnanand Sanskrit	1958
40.	Marathwada	1958
41.	G.B. Pant	1960
42.	Burdwan	1960
43.	Kalyani	1960

APPENDIX I (Contd.)

Sl. No.	<i>Name of the University/ Institution</i>	<i>Year of establishment</i>
44.	Bhagalpur	1960
45.	Ranchi	1960
46.	K.S. Darbhanga Sanskrit	1961
47.	Punjab Agricultural	1962
48.	Punjabi	1962
49.	Orissa Agriculture & Technology	1962
50.	North Bengal	1962
51.	Rabindra Bharati	1962
52.	Magadh	1962
53.	Jodhpur	1962
54.	Mohan Lal Sukhadia	1962
55.	Shivaji	1962
56.	Devi Ahilya	1964
57.	Jiwaji	1964
58.	Ravi Shankar	1964
59.	University of Agricultural Sciences	1964
60.	Andhra Pradesh Agricultural	1964
61.	Bangalore	1964
62.	Jawaharlal Nehru Krishi	1964
63.	Dibrugarh	1965
64.	Kanpur	1965
65.	Meerut	1965
66.	Madurai Kamraj	1965
67.	Saurashtra	1965
68.	South Gujarat	1965
69.	Berhampur	1967
70.	Sambalpur	1967
71.	Gujarat Ayurveda	1968
72.	Jawaharlal Nehru	1968
73.	Mahatma Phule Krishi Vidyapith	1968
74.	Calicut	1968
75.	Awadesh Pratap Singh	1968
76.	Assam Agricultural	1968
77.	Guru Nanak Dev	1969
78.	Jammu	1969
79.	Panjabrao Krishi	1969
80.	Haryana Agricultural	1970
81.	Himachal Pradesh	1970
82.	Bhopal	1970
83.	Rajendra Agricultural	1970
84.	Tamil Nadu Agricultural	1971
85.	Cochin	1971
86.	Kerala Agricultural	1972
87.	Gujarat Agricultural	1972
88.	Konkan Krishi Vidyapith	1972

APPENDIX I (Contd.)

Sl. No.	Name of the University/ Institution	Year of establishment
89.	L. N. Mittal Marathwada Krishi Vidyapith	1972
90.	Jawaharlal Nehru Technological University	1972
91.	North Eastern Hill Kumaon	1973
92.	Garhwal	1973
93.	Kashi Vidyapith	1973
94.	Bidhan Chandra Krishi University	1974
95.	Hyderabad	1974
96.	Narendra Deo Agriculture & Technology	1974
97.	Chandrasekhar Azad Agricultural & Technology	1974
98.	Avadh	1974
99.	Bundelkhand	1974
100.	Rohilkhand	1975
101.	Maharishi Dayanand	1975
102.	Kakatiya	1976
103.	Nagarjuna	1976
104.	Bhavnagar	1976
105.	Anne	1978
106.	Himachal Pradesh Krishn	1978
107.	Manipur	1978
108.	Gulbarga	1978
109.	Mangalore	1980
110.	Birsa Agriculture	1980
111.	Vidya Sagar	1980
112.	Sri Jagannath Sanskrit	1981
113.	Sri Krishnadevaraya	1981
114.	Tarni	1981
115.	Bharathiar	1981
116.	Bharathidasan	1982
117.	Sher-e-Kashmir University of Agricultural Science & Technology	1982
118.	Andhra Pradesh Open University	1982
119.	Sri Padmavathy Mahila	1983
120.	Amravati	1983
121.	Guru Ghoshadas	1983
122.	Gandhi	1983
123.		
124.		

APPENDIX I (Contd.)

<i>Sl. No.</i>	<i>Name of the University/ Institution</i>	<i>Year of establishment</i>
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Institutions deemed to be Universities

1.	Indian Institute of Science, Bangalore	1958
2.	Indian Agricultural Research Institute	1958
3.	Gurukul Kangri Vishvavidyalaya, Hardwar	1962
4.	Jamia Millia Islamia, New Delhi	1962
5.	Gujarat Vidyapith, Ahmedabad	1963
6.	Tata Institute of Social Sciences, Bombay	1964
7.	Birla Institute of Technology & Science, Pilani	1964
8.	Indian School of Mines, Dhanbad	1967
9.	Central Institute of English & Foreign Languages, Hyderabad	1973
10.	Gandhigram Rural Institute Gandhigram	1976
11.	School of Planning & Architecture, New Delhi	1979
12.	Dayalbagh Education Institute, Agra	1981
13.	Sri Sathya Sai Institute of Higher Learning, Prasanthi Nilayam	1981
14.	Banasthali Vidyapith, Rajasthan	1983
15.	Indian Veterinary Research Institute, Izatnagar	1983

APPENDIX II

Growth of Student Enrolment (1964-65 to 1983-84)

<i>Year</i>	<i>Total Enrolment</i>	<i>Increase over the preceding year</i>	<i>Percentage increase</i>
1964-65	9,50,277	1,08,167	12.8
1965-66	10,66,884	1,16,607	12.3
1966-67	11,90,713	1,23,829	11.6
1967-68	13,70,261	1,79,548	15.1
1968-69	15,66,103	1,95,842	14.3
1969-70	17,92,780	2,26,677	14.5
1970-71	19,53,709	1,60,920	9.0
1971-72	20,65,041	1,11,341	5.7
1972-73	21,68,107	1,03,066	5.0
1973-74	22,34,385	66,278	3.1
1974-75	23,66,541	1,32,156	5.9
1975-76	24,26,109	59,568	2.5
1976-77	24,31,563	5,454	0.2
1977-78	25,64,972	1,33,409	5.5
1978-79	26,18,228	53,256	2.1
1979-80	26,48,579	30,351	1.2
1980-81	27,52,437	1,03,858	3.9
1981-82	29,52,066	1,99,629	7.3
1982-83	31,33,093	1,81,027	6.1
1983-84*	33,59,323	2,26,230	7.2

*Estimated

APPENDIX III

Growth of Enrolment (excluding P.U.C./Inter/P.P.) during the period from 1979-80 to 1983-84

Sl. No.	State/Union Territory	1979-80		
		Enrolment	Increase over the preceding year	Percentage increase
1.	Andhra Pradesh	1,65,037	21,442	14.9
2	Assam	52,021	4,804	10.2
3.	Bihar	1,25,035	—867	—0.7
4	Gujarat	1,69,878	—4,891	—2.8
5.	Haryana	62,582	2,102	3.5
6.	Himachal Pradesh	11,849	553	4.9
7.	Jammu & Kashmir	17,993	—764	—4.1
8.	Karnataka	11,82,675	7,677	4.4
9.	Kerala	1,06,297	6,322	6.3
10.	Madhya Pradesh	2,00,134	996	0.5
11.	Maharashtra	3,34,211	—9,892	—2.9
12.	Manipur	7,691	1,551	25.3
13.	Meghalaya/Nagaland	7,170	526	7.9
14.	Orissa	50,412	3,459	7.4
15.	Punjab	1,12,139	—635	—0.6
16.	Rajasthan	1,44,441	7,009	5.1
17	Tamil Nadu	1,84,295	13,765	8.1
18.	Uttar Pradesh	4,31,584	14,016	3.4
19.	West Bengal/Tripura/Sikkim	2,08,274	—28,175	—11.9
20.	Delhi	74,861	—8,683	—10.4
	All India	26,48,579	30,351	1.2

APPENDIX III (Contd.)

Sl. No.	State/Union Territory	1980-81		
		Enrolment	Increase over the preceding year	Percentage increase
1.	Andhra Pradesh	1,93,416	28,379	17.2
2.	Assam	47,517	-4,504	-8.7
3.	Bihar	1,39,341	14,306	11.4
4.	Gujarat	1,74,786	4,908	2.9
5.	Haryana	58,900	-3,682	-5.9
6.	Himachal Pradesh	12,986	1,137	9.6
7.	Jammu & Kashmir	21,968	3,975	22.1
8.	Karnataka	2,00,829	18,154	9.9
9.	Kerala	1,13,352	7,055	6.6
10.	Madhya Pradesh	2,12,823	12,689	6.3
11.	Maharashtra	3,35,312	1,101	0.3
12.	Manipur	6,601	-1,090	-14.2
13.	Meghalaya/Nagaland	7,416	246	3.4
14.	Orissa	57,194	6,782	13.5
15.	Punjab	1,12,103	-36	—
16.	Rajasthan	1,44,130	311	0.2
17.	Tamil Nadu	2,05,382	21,087	11.4
18.	Uttar Pradesh	4,45,677	14,093	3.3
19.	West Bengal/Tripura/Sikkim	1,89,849	-18,425	-8.8
20.	Delhi	72,855	-2,006	-2.7
All India		27,52,437	1,03,858	3.9
				—

APPENDIX III (Contd.)

Sl. No.	State/Union Territory	1981-82		
		Enrolment	Increase over the preceding year	Percentage increase
1.	Andhra Pradesh	2,18,441	25,025	12.9
2.	Assam	58,781	11,264	23.7
3.	Bihar	1,66,473	27,132	19.5
4.	Gujarat	1,95,179	20,393	11.7
5.	Haryana	59,534	634	1.1
6.	Himachal Pradesh	14,771	1,785	13.7
7.	Jammu & Kashmir	20,286	-1,682	-7.7
8.	Karnataka	2,15,861	15,032	7.5
9.	Kerala	1,19,551	6,199	5.5
10.	Madhya Pradesh	2,18,931	6,108	2.9
11.	Maharashtra	3,48,814	13,502	4.0
12.	Manipur	8,098	1,497	22.7
13.	Meghalaya/Nagaland	8,628	1,212	16.3
14.	Orissa	61,666	4,472	7.8
15.	Punjab	1,12,788	685	0.6
16.	Rajasthan	1,53,312	9,182	6.4
17.	Tamil Nadu	2,19,286	13,904	6.8
18.	Uttar Pradesh	4,55,949	10,272	2.3
19.	West Bengal/Tripura/Sikkim	2,09,494	19,645	10.3
20.	Delhi	86,223	13,368	18.3
All India		29,52,066	1,99,629	7.3

APPENDIX III (Contd.)

Sl. No.	State/Union Territory	1982-83		
		Enrolment	Increase over the preceding year	Percentage increase
1.	Andhra Pradesh	2,44,332	25,891	11.9
2.	Assam	65,930	7,149	12.2
3.	Bihar	1,98,018	31,545	18.9
4.	Gujarat	1,98,438	3,259	1.7
5.	Haryana	65,022	5,448	9.2
6.	Himachal Pradesh	16,305	1,534	10.4
7.	Jammu & Kashmir	20,190	—96	—0.5
8.	Karnataka	2,32,090	16,229	7.5
9.	Kerala	1,25,111	5,560	4.7
10.	Madhya Pradesh	2,25,580	6,649	3.0
11.	Maharashtra	3,73,385	24,571	7.0
12.	Manipur	8,555	457	5.6
13.	Meghalaya/Nagaland	8,207	—421	—4.9
14.	Orissa	64,853	3,187	5.2
15.	Punjab	1,17,580	4,792	4.2
16.	Rajasthan	1,54,863	1,551	1.0
17.	Tamilnadu	2,29,075	9,789	4.5
18.	Uttar Pradesh	4,55,305	—644	—0.1
19.	West Bengal/Tripura/Sikkim	2,38,498	29,004	13.8
20.	Delhi	91,756	5,533	6.4
All India		31,33,093	1,81,027	6.1

APPENDIX III (Contd.)

Sl. No	State/Union Territory	1983-84		
		Enrolment (estimated)	Increase over the preceding year	Percentage increase
1.	Andhra Pradesh	2,73,176	28,844	11.8
2.	Assam	71,118	5,188	7.9
3.	Bihar	2,28,441	30,423	15.4
4.	Gujarat	2,04,697	6,259	3.2
5.	Haryana	69,310	4,288	6.6
6.	Himachal Pradesh	18,319	2,014	12.4
7.	Jammu & Kashmir	21,348	1,158	5.7
8.	Karnataka	2,59,804	27,714	11.9
9.	Kerala	1,40,226	15,115	12.1
10.	Madhya Pradesh	2,37,382	11,802	5.2
11.	Maharashtra	3,97,280	23,895	6.4
12.	Manipur	10,514	1,959	22.9
13.	Meghalaya/Nagaland	10,367	2,160	26.3
14.	Orissa	72,642	7,789	12.0
15.	Punjab	1,22,272	4,692	4.0
16.	Rajasthan	1,68,414	13,551	8.8
17.	Tamil Nadu	2,47,226	18,151	7.9
18.	Uttar Pradesh	4,60,793	5,448	1.2
19.	West Bengal/Tripura/Sikkim	2,48,559	10,061	4.2
20.	Delhi	97,435	5,679	6.2
All India		33,59,323	2,26,230	7.2
				6.1

Note:—The enrolments relating to the Union Territories of Andaman and Nicobar Islands, Arunachal Pradesh, Mizoram, Pondicherry, Goa, Daman and Diu have been clubbed with the enrolments of Punjab, Assam, Meghalaya, Tamil Nadu, Maharashtra and Gujarat respectively. The enrolment of Chandigarh has been merged with that of Punjab.

APPENDIX IV

Student Enrolment in the Universities—Stagewise (1979-80 to 1983-84)

Stage	1979-80		1980-81		1981-82		1982-83		1983-84(Estimated)	
	Enrol- ment of total	Per- centage age	Enrol- ment of total	Per- centage of total	Enrol- ment of total	Per- centage of total	Enrol- ment of total	Per- centage of total	Enrol- ment of total	Per- centage of total
Graduate	23,07,924	87.1	24,01,485	87.2	25,88,759	87.7	27,57,893	88.0	29,32,451	87.3
Postgraduate	2,65,251	10.0	2,73,337	9.9	2,85,892	9.7	2,96,103	9.4	3,01,044	9.8
Research	29,570	1.1	32,171	1.2	34,588	1.2	36,731	1.2	42,697	1.3
Diploma/Certificate	45,814	1.8	45,444	1.7	42,827	1.4	42,366	1.4	53,131	1.6
Total	26,48,579	100.0	27,52,407	100.0	29,52,066	100.0	31,33,093	100.0	33,59,323	100.0

APPENDIX V

Stagewise Enrolment: Universities and Affiliated Colleges 1983-84 (Estimated)

Stage	University Departments/	Affiliated	Total	Percentage in Affiliated Colleges			
	University Colleges	Colleges		1983-84	1982-83	1981-82	1980-81
Graduate	3,98,210	25,34,241	29,32,451	86.4	87.8	87.9	88.6
Postgraduate	1,46,142	1,84,902	3,31,044	55.8	56.1	55.3	54.2
Research	36,672	6,025	42,697	14.1	14.5	15.1	13.9
Diploma/Certificate	30,971	22,160	53,131	41.7	41.2	40.3	43.6
Total	6,41,995	27,47,328	33,59,323	81.8	83.3	83.2	83.5

Growth of Study									
1979-80	1980-81	1981-82	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88	1988-89
Arts (including Drama)									
10,760.76	40,611,14,417	40,511,90,177	40,512,95,857	40,213,13,154	39,1				
Scenae	5,08,783	19,25,33,859	19,45,28,266	19,66,23,585	19,9	19,8	19,8	19,8	19,8
Commerce	5,16,170	19,55,54,251	20,16,62,801	21,321,4	21,4	22,4	22,4	22,4	22,4
Education	72,481	2,871,20,4	2,671,16,8	2,474,167	2,4	2,4	2,4	2,4	2,4
Engineering/Technology	1,18,607	4,512,8,97	4,713,0,189	4,414,158	4,5	4,7	4,7	4,7	4,7
Medicine	1,12,191	4,211,0,020	4,011,3,794	3,911,0,902	3,6	3,6	3,6	3,6	3,6
Ageculture	39,926	1,539,241	1,419,318	1,310,307	1,3	1,3	1,3	1,3	1,3
Veterinary Science	7,435	0,37,645	0,18,757	0,18,757	0,3	0,3	0,3	0,3	0,3
Law	1,77,448	6,71,74,94	6,11,84,445	5,91,83,157	5,8	5,8	5,8	5,8	5,8
Others	18,840	0,718,005	0,718,264	0,622,613	0,7	0,7	0,6	0,7	0,7
Total	26,48,579	100,027,52,457	100,029,52,066	100,031,33,093	100,031,33,093	100,031,33,093	100,031,33,093	100,031,33,093	100,031,33,093

APPENDIX VII

Distribution of Colleges According to Courses of Study 1979-80 to 1983-84

(Number of Colleges)

Courses of Study	Number of Colleges*				
	1979-80	1980-81	1981-82	1982-83	1983-84
Arts, Science and Commerce	3,306	3,393	3,504	3,617	3,758
Technical/Professional	448	490	510	522	563
<i>Break up</i>					
(a) Engineering/Technology	124	149	155	158	191
(b) Medicine/Pharmacy/Ayurveda/Nursing/Dentistry/Homeopathy	247	262	272	279	286
(c) Agriculture	52	54	56	57	58
(d) Veterinary Science	25	25	27	28	28
Law	152	163	168	179	186
Physical Education & Education	332	350	364	377	391
Oriental Learning	271	274	282	283	283
Music/Fine Arts	49	52	58	61	65
Total	4,558	4,722	4,886	5,039	5,246

*Excludes Junior Colleges and Colleges having only Diploma/Certificate Courses.

APPENDIX VIII

Increase in Number of Colleges during the period from 1979-80 to 1983-84 (Statewise)

State/Union Territory	1979-80		1980-81		1981-82		1982-83		1983-84	
	No. of colleges UC+AC	No. of colleges UC+AC Previous year	No. of colleges over the UC+AC Previous year	No. of colleges UC+AC Previous year	No. of colleges over the UC+AC Previous year	No. of colleges UC+AC Previous year	No. of colleges UC+AC Previous year	No. of colleges UC+AC Previous year	No. of colleges UC+AC Previous year	Increase during the period from 1979-80 to 1983-84
1	2	3	4	5	6	7	8	9	10	11
1. Andhra Pradesh	337	363	26	399	36	410	11	420	10	83
2. Assam	150	141	9	148	7	154	6	154	—	4
3. Bihar	332	386	54	417	11	442	25	473	31	141
4. Gujarat	272	271	—1	279	8	283	4	285	2	13
5. Haryana	129	131	2	137	6	139	2	143	4	14
6. Himachal Pradesh	27	27	—	27	—	27	—	27	—	—
7. Jammu and Kashmir	37	38	1	40	2	40	—	41	1	4
8. Karnataka	382	436	54	440	4	466	26	498	32	116
9. Kerala	173	179	6	180	1	183	1	184	1	11
10. Madhya Pradesh	345	344	—1	360	16	379	19	396	17	51
11. Maharashtra	596	600	4	611	11	625	14	693	68	97
12. Manipur	24	22	—2	22	—	22	—	22	—	—2
13. Meghalaya/Nagaland	29	30	1	32	2	33	1	33	—	4
14. Orissa	118	119	1	137	18	150	13	179	29	51

APPENDIX VIII (Contd.)

	1	2	3	4	5	6	7	8	9	10	11
15. Punjab	217	219	2	222	1	228	6	228	-	-	11
16. Rajasthan	192	201	9	204	3	211	7	211	10	29	
17. Tamil Nadu	276	282	6	282	-	285	3	285	-	-	9
18. Uttar Pradesh	540	547	7	548	1	559	11	561	2	21	
19. West Bengal/Tripura/ Sikkim	328	332	4	347	15	349	2	348	-1	-1	30
20. Delhi	54	54	-	54	-	54	-	55	1	1	
 Total	 4,558	 4,722	 164	 4,886	 164	 5,019	 153	 5,246	 207	 688	

UC=University Colleges

AC=Affiliated Colleges

Note - Colleges situated in the Union Territory of A&N Islands, Arunachal Pradesh, Mizoram, Pondicherry, Goa, Daman & Diu have been merged with the colleges of Punjab, Assam, Meghalaya, Tamil Nadu, Maharashtra and Gujarat respectively. Colleges in Chandigarh have been merged with Punjab.

APPENDIX IX

Increase in Number of Affiliated Colleges (Arts, Science and Commerce only) during the period 1979-80 to 1983-84 (Statewise)

State/Union Territory	1979-80	1980-81		1981-82		1982-83		1983-84		
	No. of colleges	No. of colleges over the preceding year	Increase	No. of colleges	No. of colleges over the preceding year	Increase	No. of colleges	No. of colleges over the preceding year	Increase	Increase during the period from 1979-80 to 1983-84
1	2	3	4	5	6	7	8	9	10	11
1. Andhra Pradesh	229	242	13	273	31	281	8	287	6	58
2. Assam	123	114	-9	119	5	125	6	125	-	2
3. Bihar*	229	264	35	279	15	300	21	331	31	102
4. Gujarat	183	183	-	188	5	190	2	191	1	8
5. Haryana	94	93	-1	99	6	102	3	106	4	12
6. Himachal Pradesh	22	22	-	22	-	22	-	22	-	-
7. Jammu and Kashmir	22	22	-	23	1	23	-	23	-	1
8. Karnataka	251	273	22	272	4	291	19	314	23	63
9. Kerala	122	127	5	128	1	129	1	128	-1	6
10. Madhya Pradesh	240	242	2	253	11	270	17	283	13	43
11. Maharashtra	427	427	-	432	5	441	9	472	31	45
12. Manipur	21	18	-3	18	-	18	-	18	-	3

APPENDIX IX (Contd.)

	1	2	3	4	5	6	7	8	9	10	11
13. Meghalaya/Nagaland	22	22		25	3	25	—	25	—	—	3
14. Orissa	92	90	2	97	7	104	7	118	14	36	
15. Punjab	168	170	2	171	1	176	5	176	—	8	
16. Rajasthan	114	119	5	122	3	125	1	130	5	16	
17. Tamil Nadu	197	206	9	206	—	206	—	204	2	7	
18. Uttar Pradesh	367	372	5	376	4	387	11	390	3	23	
19. West Bengal/Tripura, Sikkim											
20. Delhi	37	37		37		37	—	36	—	—	1
Total	3,217	3,301	84	3,412	111	3,525	113	3,632	127	435	

*Also includes constituent colleges

Note. Colleges situated in the Union Territories of Andaman and Nicobar Islands, Arunachal Pradesh, Mizoram, Pondicherry, Goa, Daman and Diu have been merged with the colleges of Punjab, Assam, Meghalaya, Tamil Nadu, Maharashtra and Gujarat respectively. Colleges in Chandigarh have also been merged with colleges in Punjab.

APPENDIX X

Number and Distribution of Teaching Staff in the University Departments University Colleges according to Designation (1979-80 to 1983-84)

<i>Year</i>	<i>Professors</i>	<i>Readers</i>	<i>Lecturers*</i>	<i>Tutors/ Demonstrators</i>	<i>Total</i>
1979-80	3,942 (9.9)	7,690 (19.3)	25,610 (64.3)	2,596 (6.5)	39,838 (100.0)
1980-81	4,123 (10.3)	7,900 (19.8)	25,758 (64.4)	2,183 (5.5)	39,964 (100.0)
1981-82	4,170 (9.9)	9,299 (22.0)	26,648 (63.2)	2,069 (4.9)	42,186 (100.0)
1982-83	4,665 (10.0)	10,419 (22.3)	29,415 (63.0)	2,160 (4.7)	46,659 (100.0)
1983-84**	4,860 (10.0)	11,189 (23.0)	30,630 (62.9)	2,015 (4.1)	48,694 (100.0)

Note: Figures in parentheses indicate the percentage of the cadre to the total staff in the corresponding year.

*Including Assistant Professors and Assistant Lecturers

**Estimated

APPENDIX XI

Number and Distribution of Teaching Staff in the Affiliated Colleges according to Designation (1979-80 to 1983-84)

<i>Year</i>	<i>Senior Teachers*</i>	<i>Lecturers**</i>	<i>Tutors/ Demonstrators</i>	<i>Total</i>
1979-80	15,060 (10.1)	1,23,597 (83.7)	10,007 (6.8)	1,48,664 (100.0)
1980-81	16,343 (10.7)	1,27,952 (83.4)	9,082 (5.9)	1,53,377 (100.0)
1981-82	15,559 (9.9)	1,34,019 (85.0)	8,100 (5.1)	1,57,718 (100.0)
1982-83	18,905 (11.5)	1,37,780 (83.8)	7,736 (4.7)	1,64,421 (100.0)
1983-84***	20,186 (11.8)	1,44,293 (84.1)	7,004 (4.1)	1,71,483 (100.0)

Note. Figures in parentheses indicate the percentage of the cadre to the total staff in the corresponding year.

*Including Principals/Senior Lecturers/Readers

**Including Assistant Professors & Assistant Lecturers

***Estimated.

APPENDIX XII

Number of Doctorate Degrees Awarded: Facultywise (1978-79 to 1983-84)

<i>Faculty</i>	1978-79	1979-80	1980-81	1981-82	1982-83*
Arts	1,811	1,831	2,246	2,347	2,414
Science	2,044	2,261	2,792	2,846	2,875
Commerce	87	118	105	173	167
Education	105	120	173	178	181
Engineering/Technology	134	176	139	190	163
Medicine	48	56	44	66	68
Agriculture	364	422	456	471	577
Veterinary Science	58	58	60	93	63
Law	10	13	13	14	21
Others	14	21	42	26	25
Total	4,675	5,076	6,080	6,404	6,554

*Provisional

APPENDIX XIII

List of Centres of Advanced Study in Science Subjects

<i>Sl. No.</i>	<i>Subject</i>	<i>University</i>	<i>Thrust Area(s)</i>
1	2	3	4
1.	Physics	Department of Physics and Astrophysics, Delhi University	Theoretical Physics and Astrophysics
2.	Physics	Institute of Radiophysics and Electronics, Calcutta University	Radiophysics and Electronics
3.	Chemistry	Department of Chemical Technology, Bombay University	Chemistry of Textile Fibres and Dyes
4.	Chemistry	Department of Chemistry, University of Delhi	Chemistry of Natural Products
5.	Botany	Department of Botany, University of Delhi	Plant Pathology and Embryology
6.	Botany	Department of Botany, University of Madras	Plant Pathology and Mycology
7.	Zoology	Department of Marine Biology, Annamalai University	Marine Biology
8.	Zoology	Department of Zoology, University of Delhi	Cell Biology and Endocrinology
9.	Geology	Department of Geology, Panjab University	Himalayan Geology and Palaeontology
10.	Mathematics	Department of Mathematics, Bombay University (in collaboration with the Tata Institute of Fundamental Research)	Pure Mathematics
11.	Mathematics	Department of Mathematics, Panjab University	Pure Mathematics
12.	Mathematics	Department of Mathematics, University of Madras and Ramanujan Institute of Mathematics, Madras	Pure Mathematics

APPENDIX XIII (Contd.)

1	2	3	4
13.	Astronomy	Department of Astronomy and Nizamia Observatory, Osmania University, Hyderabad	Experimental Astronomy
14.	Biochemistry	Department of Biochemistry Indian Institute of Science, Bangalore	Proteins, Lipids, Vitamins
15.	Botany	Banaras Hindu University	Algology and Ecology
16.	Botany	Calcutta University	Cell and Chromosome Research
17.	Inorganic and Physical Chemistry	Indian Institute of Science, Bangalore	Inorganic and Physical Chemistry
18.	Metallurgical Engineering	Banaras Hindu University	Physical and Mechanical Metallurgy
19.	Biophysics	Indian Institute of Science, Bangalore	Molecular Biophysics

APPENDIX XIV

List of Centres of Advanced Study in Humanities and Social Sciences

<i>Sl. No.</i>	<i>Subject</i>	<i>University</i>	<i>Thrust Area(s)</i>
1	2	3	4
1.	Economics	Department of Economics Bombay University, Bombay	Public Finance and Industrial Economics
2.	Economics	Department of Economics Delhi University, Delhi	Economics of Development and Economic History
3.	Economics	Gokhale Institute of Politics and Economics, Poona University, Poona	Agricultural Economics
4	Linguistics	Department of Linguistics Annamalai University	Dravidian Linguistics
5.	Education	Department of Education M.S. University of Baroda	Educational Research
6.	Philosophy	Department of Philosophy Madras University, Madras	Advaita and Allied System of Philosophy
7.	Sanskrit	Department of Sanskrit Poona University, Poona	Sanskrit Literature
8	History	Department of History Aligarh Muslim University	Medieval Indian History
9.	Sociology	Department of Sociology Delhi University	Sociology
10.	Psychology	Department of Psychology Utkal University, Bhubaneswar	Educational and Social Psychology

APPENDIX XV

List of Department of Special Assistance in Humanities and Social Sciences

<i>Sl. No.</i>	<i>Subject</i>	<i>University/College</i>	<i>Thrust Area(s)</i>
1	2	3	4
1.	Economics	Andhra University	Co-operation, Applied Economics, International Trade and Public Finance
2.	Economics	Calcutta University	Urban Economics
3.	Economics	Punjabi University	Regional Economics
4.	Economics	Presidency College	Problems of Industrial Economics and Trade Policy Welfare Economics
5.	Economics	Osmania University	Econometrics and Economic Planning
6.	Economics	Sri Venkateswara University	(i) Agricultural Economics (ii) Industrial Economics (iii) Economics of Labour (iv) International Economics and Developing of Banking
7.	Economics	MS University of Baroda	(i) Economics of Education and human resources (ii) Growth of Process of Indian Economics
8.	History	Patna	(i) Socio-Economic History (ii) Urban History (iii) South Indian History (iv) International relations (v) Russian History (vi) Diplomatic History
9.	History	Baroda	(i) Social and Economic History of Medieval and Modern Indian History (ii) Historiography
10.	History	Allahabad	Socio-Economic History of Modern India

APPENDIX XV (Contd.)

1	2	3	4
11. History	Calcutta		<ul style="list-style-type: none"> (i) Social and Economic History of Modern India (ii) European History (iii) East Asian History
12. History	Mysore		Pre-modern and modern South Indian History
13. Political Science	Rajasthan		<ul style="list-style-type: none"> (i) Indian Political Tradition and contemporary political structure and process in India. (ii) Rural Politics and development and comparative political Theory
14. Philosophy	Rajasthan		<ul style="list-style-type: none"> (i) Indian Philosophy (ii) Systematic Western Philosophy (iii) Analysis Western Philosophy (iv) Existentialism
15. Philosophy	Jadavpur		<ul style="list-style-type: none"> (i) Philosophy of Language and ethics (ii) Social Philosophy
16. Psychology	Allahabad		<ul style="list-style-type: none"> (i) Social Changes and rural development (ii) Socialisation and organisational Psychology.
17. Sociology	Punjab		Urban Sociology and Population Study
18. Sociology	Ravi Shankar		<ul style="list-style-type: none"> (i) Study of Traditional folk culture (ii) Study of Elite Traditions (iii) Dynamics of Indian Society
19. Anthropology	Ranchi		<ul style="list-style-type: none"> (i) Urbanisation and Industrialisation (ii) Advanced Anthropological theory (iii) Sociology with functional structural analysis
20. Linguistics	Osmania		Historical and Comparative Dravidian languages and Socio Linguistics

APPENDIX XV (Contd.)

1	2	3	4
21. Archaeology	Decan College		<ul style="list-style-type: none"> (i) Pre-historic and proto historic Excavations (ii) Ethno-Archaeology (iii) Palaeonotology (iv) Paleography, epigraphy and numismatics
22. Gujarati	S.N.D.T.		Modern Gujarati Literature
23. Hindi	Sardar Patel		<ul style="list-style-type: none"> (i) Linguistics and linguistic approach to literature (ii) Comparative literature (iii) Drama and Dramaturgy
24. Bengali	Burdwan		<ul style="list-style-type: none"> (i) Language and Culture of Rarh (ii) A comparative study of literature of Eastern India Languages (iii) Modern Bengali poetry Structural and Statistical Study (iv) 19th Century of Bengali literature
25. Kannada	Mysore		<ul style="list-style-type: none"> (i) Kannada literary Criticism (ii) Folk Lore (iii) Scientific terminology and Linguistic study

APPENDIX XVI

List of Departments of Special Assistance in Science Subjects

<i>Subject</i>	<i>University</i>	<i>Thrust Area</i>
Chemistry	(1) Allahabad	(i) Fast reaction Kinetics (ii) Natural Products & Synthetics Organic Chemistry (iii) Structural Chemistry Natural products Natural products Organic, Inorganic and Physical Chemistry
	(2) Calcutta	Natural products
	(3) Osmania	Natural products
	(4) Panjab	Organic, Inorganic and Physical Chemistry
	(5) Poona	Organic, Inorganic and Physical Chemistry
	(6) Rajasthan	(i) Structural aspect of Organometallic compounds (ii) Homogeneous Catalyst (iii) Organotin compounds as Biocides (iv) Chemistry of Nitrogen Ligand (v) Kinetics and Electro-Organic reactions
	(7) Sardar Patel	Polymer Chemistry
	(8) I.I.Sc., Bangalore	Solid State Structural Chemistry
	(9) I.I.Sc., Bangalore	Organic Chemistry
	(10) Madras	Organic Chemistry
	(11) Hyderabad	Organic Chemistry
	(12) Jadavpur	Organic, Inorganic and Physical Chemistry
Bio-Chemistry	(1) Lucknow	Bio-chemistry and Metabolism of angiosperm parasite including Host parasite interaction
	(2) M.S.U., Baroda	(i) Plant-Bio-chemistry (ii) Food Microbiology (iii) Human Nutrition (iv) Experimental Nutrition (v) Microbial Bio-chemistry
	(3) Poona	
	(4) Roorkee	
	(5) Andhra	
Physics	(1) Poona	Irregularities and drifts of Ionization and meteor wind radars Surface Physics
	(2) Roorkee	(i) Theoretical and experimental solid state physics (ii) Physics of collision process Nuclear physics
	(3) Panjab	
	(4) Andhra	
	(5) I.I.Sc., Bangalore	Condensed matter physics
	(6) B.H.U.	(i) Physics of materials (ii) Theoretical physics

APPENDIX XVI (Contd.)

<i>Subject</i>	<i>University</i>	<i>Thrust Area</i>
	(7) A.M.U.	(i) Theoretical Nuclear physics with interacting experimental physics (ii) Laser Raman Spectroscopy (iii) Digital Signal Processing Techniques (iv) Crystallography & Biophysics
	(8) Madras	
Mathematics	(1) Bangalore (2) Jadavpur (3) A.M.U. (4) Madurai	Fluid Mechanics Applied and pure Algebra, Analysis Algebra, Number theory, Analysis
Statistics	(1) Poona	Probability theory, Stochastic process, applied probability, statistical inference
Botany	(1) Andhra (2) Lucknow (3) Patna (4) Kalyani	Cytogenetics Plant Nutrition Cytogenetics and Plant breeding Molecular Taxonomy
Zoology	(1) B.H.U. (2) Calcutta (3) Marathwada (4) Panjab	(i) Cell Physiology & Biochemistry (ii) Cytogenetics (iii) Reproductive Biology Entomology and fisheries Comparative animal physiology & Invertebrate endocrinology (i) Aquatic Biology (ii) Cell Biology (iii) Entomology (iv) Parasitology
Bio-Sciences (Interdisciplinary)	(1) Madurai Kamraj (2) M.S.U. Baroda (3) B.H.U. (I.M.S.) (4) Saurashtra	(i) Bio-chemistry & Molecular Biology (ii) Developmental Biology and Immunology (iii) Animal Physiology (iv) Microbiology (v) Plant Physiology and Environmental Biology (vi) Cell Biology (vii) Reproductive Physiology (viii) Plant genetics Microbiology Molecular Biology Environmental Biology and and Eco-system

APPENDIX XVI (Contd.)

<i>Subject</i>	<i>University</i>	<i>Thrust Area</i>
Geology	(1) Andhra (2) Jadavpur (3) Roorkee (4) M.S.U. Baroda (5) Mysore	Marine Geology Economic Geology (i) Engineering Geology (ii) Engineering Geophysics (iii) Engineering Geohydrology Quaternary Geology (Basic and Applied) Stratigraphy & Palaeontology
Geography	(1) A.M.U. (2) Osmania	(i) Population geography (ii) Land use and agricultural Geography Applied Geography
Engineering	(1) Anna University (2) Roorkee (3) I.I.Sc., Bangalore (4) Roorkee (5) Jadavpur (6) I.I.Sc., Bangalore (7) Jadavpur (8) I.I.Sc. (9) Bombay (10) B.H.U. (11) B.H.U. (12) B.H.U. (13) Roorkee (14) I.S.M., Dhanbad	Chemical Engineering Civil Engineering Electrical Engineering Earthquake Engineering Production Engineering Metallurgy Electrical Engineering Civil Engineering Chemical Engineering Mining Engineering Ceramic Engineering Electronics Engineering Mechanical Engineering Mining Engineering
Pharmacy	(1) Nagpur (2) Panjab	Pharmacy Pharmacy

APPENDIX XVII

Departmental Research Support Projects in Humanities and Social Sciences

<i>Sl. No</i>	<i>Subject</i>	<i>University/College</i>	<i>Thrust Area(s)</i>
1	2	3	4
1.	Music and Musicology	B H.U.	Theoretical and Practical aspects of Music
2.	Assamese	Gauhati	Assamese linguistics with special emphasis on dialect survey and socio linguistics literature, culture of North Eastern India.
3.	Marathi	Marathwada	(i) Ancient literature (ii) Modern literature (iii) Folk literature
4.	Oriya	Sambalpur	(i) Folk literature (ii) Comparative literature (iii) Modern Literature, Poetry, fiction etc.

APPENDIX XVIII

List of Departmental Research Support Project in Sciences Subjects

<i>Subject</i>	<i>University</i>	<i>Thrust Area(s)</i>
Chemistry	(1) Bangalore	Catalysis involving the whole department
	(2) Gorakhpur	Physical Chemistry (non-equilibrium thermodynamics/Statistical mechanism)
	(3) Bombay (Organic Chemistry, Unit of Pharmacy Division of UDCT)	Reaction Mechanism and Stereo Chemistry
	(4) M.S. University of Baroda	Synthetic organic and Coordination Chemistry on Exchange liquid crystals
	(5) Jodhpur	Physical Chemistry Electro-chemistry
	(6) Guru Nanak Dev	Chemistry
Physics	(1) Osmania	Solid State Physics
	(2) Rajasthan	Material Physics
	(3) Karnataka	(i) Life time and spectral measurements of Molecules and condensed matter (ii) Transport studies in organic and amorphous Semi-conductors
	(4) Sri Venkateswara	Solid State Physics
Botany	(1) Jodhpur	(i) Plant tissue culture (ii) Ecology and Taxonomy of desert Plants
	(2) Kerala	Studies on costal Ecosystem of Kerala
	(3) Allahabad	Plant Physiology, Morphology and Mycology
	(4) Sri Venkateswara	Plant Physiology
	(5) Mysore	Seed Pathology
	(6) Saugar	Mycology, Plant Pathology and Microbiology
	(7) M.S. University of Baroda	Development Physiology
	(8) Rajasthan	Plant pathology, Physiology and Bio-chemistry
Genetics	(1) Osmania	Plant Genetics
Zoology	(1) Mysore	(i) Population genetics and mutagenesis
	(2) Rajasthan	(ii) Reproductive Biology (i) Comparative Endocrinology and reproductive biology of vertebrates (ii) Ecophysiology studies on the role of environmental stresses

APPENDIX XVIII (Contd.)	
(3) Poona	Cellular and Biochemical parameters of growth and fertilization in developing chick embryo
(4) Kalyani	Cytology Cell Biology and Fishers Marine Parasitology and Marine
(5) Aligarh Muslim	Microbiology Malaria Studies
(6) Andhra	Microbiology Parasitology and Marine
(7) Gujarat	Cell Biology
(8) Cochin	Microbiology
(9) M.S. University of Baroda	Marine Sciences—Mud Bank Studies and Industrial Fisheries and Developmental Physiology/Biology
(1) Kerala	Aquatic Biology and Fisheries Biotechnology Life Sciences
(2) Ahmednagar College	Biotechnology Biotechnology
(3) Indore	Microbiology/Reproductive Physiology/Plant Physiology and Endocrinology
(4) Indian Institute of Sciences, Bangalore	Microbiology and Cell Biology
(5) Presidency College, Chennai	Microbiology and Genetics and Molecular Biology
(6) Mysore	Microbiology and Genetics and Geochemical exploration
(7) Patna	Geology & Geophysics (1) Patna
(8) Osmania	Geography/Geophysics (2) Hyderabad
(9) Dibrugarh	Geography/Geophysics (3) Dibrugarh
(1) Banaras Hindu	Geography
(2) Panjab	(i) Migration trends in Bisi-Dabab (ii) Unemployment and under employment in rural Punjab (iii) Population Geography of Scheduled Castes in India (iv) Integrated study in land use
(3) Calcutta	Geography
(1) Andhra	Chemical Engineering (Corrosion Enzymeering) Mechanical Engineering— Heat transfer
(2) Andhra	(i) Machine designing (ii) Heat transfer Mechanical Engineering— Corrosion
Techology and	Engineering and

APPENDIX XVIII (Contd.)

1	2	3
		(iii) Industrial Engineering and Fluid power control
(3) Roorkee		(iv) Metallurgy/Material research
(4) Roorkee		Electrical Engineer
		Electronics and Communication—
		(i) Gallium Arsenide technology
		(ii) Microwave propagation and power sources
(5) Roorkee		Metallurgy—
		(i) Thermodynamics
		(ii) Metal casting technology
Mathematics	(1) Roorkee	(i) Solid Mechanics and vibrations
		(ii) Fluid mechanics and magneto hydrodynamics
		(iii) Astrophysics and Cosmology

Sl. No.	Name of University	Humanities	Science	Engg.	Develop. Works	Misc.	Total	Section III	Grand Total	Central Universities						
										A	B	C	D	E	F	Use of Funds
(Major Head-wise) Under Plan and Section-III																
1.	All India	7.99	20.49	68.48	0.12	77.22	0.02	174.32	-	174.32						
2.	Banaras	15.00	113.41	41.18	0.48	38.04	0.04	171.15	0.08	171.23						
3.	Delhi	7.10	17.83	-	1.79	93.74	0.05	120.24	0.07	120.31	0.04	0.04	0.04	0.04	0.04	0.04
4.	Hyderabad	23.01	18.30	-	0.19	34.39	-	75.10	-	75.10	0.16	0.16	0.16	0.16	0.16	0.16
5.	Jawaharlal Nehru	13.25	86.52	-	0.45	41.55	-	141.77	-	141.77						
6.	NEHU	10.03	12.03	-	0.15	133.34	0.02	155.57	-	155.57						
7.	VISva-Bharati	11.28	29.33	-	0.18	8.26	0.02	49.27	-	49.27						
	Total	87.59	298.11	72.66	3.36	426.54	0.15	888.41	0.15	888.56						
*By Adjustment																

Statement showing Grants paid to Universities during 1983-84

APPENDIX XIX (Contd.)

1. Institutions intended to be University	A	B.	C.	D	E.	F.	Total	Sec. III	Grand Total	
1. R.J.T.S. Phata, Mumbai	-	0.19	2.00	-	1.60	0.07	1.86	0.40	4.26	
2. CIEFL, Hinduja Educational Institute, Mumbai	1.70	-	-	0.21	15.15	-	17.06	-	17.06	
3. Rayalaseema Educational Institute, Rayalaseema	1.53	8.54	4.50	-	2.31	-	16.88	-	16.88	
4. Gandhigram, Tamil Nadu	10.25	4.43	-	-	6.65	-	21.33	-	21.33	
5. Gujarat University, Ahmedabad	12.06	0.90	-	-	9.82	-	22.78	-	22.78	
6. Gurukul Kangri, Varanasi	0.25	-	-	-	5.16	-	5.41	-	5.41	
7. I.I.Sc. Raigarh, Raigarh	-	219.31	32.93	-	3.23	0.16	255.63	-	255.63	
8. I.I.Sc. Raigarh, Raigarh	-	-	0.44	-	-	-	0.44	-	0.44	
9. I.A.R.I. New Delhi, New Delhi	-	-	24.60	12.16	0.07	1.38	0.07	38.28	-	38.28
10. I.S.M. New Delhi, New Delhi	2.26	5.34	3.65	0.02	36.59	0.14	38.00	-	38.00	
11. School of Planning & Architecture, New Delhi, New Delhi	-	-	-	-	0.23	-	0.23	-	0.23	
12. Sri Sathya Sai Sanyasi Nilayam, Sathya Sai Learning, Prasanthi Nilayam	1.45	26.01	-	-	0.30	-	27.76	-	27.76	
13. I.I.Sc. Raigarh, Raigarh	5.64	-	-	-	1.91	0.11	7.66	0.50	8.16	
Total	35.14	289.32	55.24	0.30	74.68	0.55	455.21	0.90	456.13	
			0.44				0.44		0.44	

B. Vizir

APPENDIX XIX (Contd.)

Name of the State & University	A.	B.	C.	D	E	F.	Total	See III	Grand Total
ANDHRA PRADESH									
Andhra	5.77	52.33	15.14	1.85	6.21	0.12	81.42	—	81.42
		*0.06							*0.06
Jawaharlal Nehru	—	—	27.70	—	1.33	—	29.03	—	29.03
Kakatiya	5.67	31.81	5.10	0.05	5.26	—	47.91	—	47.91
Nagarjuna	5.64	19.85	—	0.95	1.43	—	37.87	—	37.87
Osmania	9.76	34.98	10.29	8.23	23.39	0.14	86.79	—	86.79
		*0.06							*0.06
Sri Krishna Devaraya	8.36	32.79	—	0.22	1.10	—	42.47	—	42.47
Sri Venkateswara	11.51	45.73	6.28	1.70	14.89	0.28	80.39	—	80.39
Total	46.71	217.51	64.51	13.00	53.61	0.54	395.88	—	395.88
		*0.12							*0.12

ASSAM

Dibrugarh	3.40	0.68	2.00	0.45	3.92	—	10.45	—	10.45
Gauhati	9.53	10.38	1.50	0.97	7.05	0.21	29.64	—	29.64
Total	12.93	11.06	3.50	1.42	10.97	0.21	40.09	—	40.09

*By adjustment

Bihar									
Name of the State & University									
A	B	C	D	E	F	Third	Sec. III	Grand	Total
15.45	20.95	-	0.41	0.24	0.33	37.38	-	37.38	
Rajbari									
K.S. Dharbhanga Sanskriti	2.00	-	-	-	-	2.00	-	2.00	
Mysaigh	6.20	10.65	-	-	2.52	-	28.42	-	28.42
L.N. Mithila	-	-	-	-	-	-	-	-	
Purna	16.49	25.45	6.50	0.32	27.85	0.05	76.66	-	76.66
Ranach	6.33	10.44	-	0.69	0.45	0.02	17.35	-	17.35
Total	51.97	82.92	6.50	1.48	47.34	0.40	190.61	-	190.61
GUJARAT									
M.S. Univ. of Baroda	29.21	80.86	38.40	0.13	8.26	0.15	157.01	-	157.01
Sardar Patel	10.34	21.65	-	0.07	12.90	-	44.96	-	44.96
Saurashtra	11.69	35.96	-	-	23.10	-	63.85	-	63.85
South Gujarat	10.87	30.28	-	-	9.59	-	50.24	-	50.24
Total	76.31	191.33	38.40	0.42	110.27	0.17	417.10	-	417.10
*By adjustment.									

APPENDIX XIX (Contd.)

Name of the State & University	A	B	C	D	E	F	Total	Sec. III	Grand Total
HARYANA									
Haryana Agricultural		0.12	..	..	0.20	0.12	0.44	..	0.44
Kurukshetra	7.37	15.29	..	0.94	11.66	0.13	35.39	..	35.39
Maharishi Dayanand	17.08	19.95	..	..	12.35	..	49.38	..	49.38
Total	24.45	35.36	..	0.94	24.21	0.25	85.21	..	85.21

HIMACHAL PRADESH

Himachal Pradesh	3.52	17.94	..	0.12	19.66	0.02	41.26	..	41.26
Total	3.52	17.94	..	0.12	19.66	0.02	41.26	..	41.26

JAMMU & KASHMIR

Jammu	4.00	21.67	..	..	1.94	..	27.61	..	27.61
Kashmir	2.30	10.81	..	0.02	7.38	..	20.51	..	20.51
Total	6.30	32.48	..	0.02	9.32	..	48.12	..	48.12

Name of the State & University	A	B	C	D	E	F	Total	Sec.III	Grad.I	Total	Sec.III	Grad.I	Total	Sec.III	Grad.I	Total	Sec.III	Grad.I	Total	Sec.III	Grad.I	Total	Sec.III	Grad.I		
Bangalore	2.48	44.55	26.92	0.08	4.68	0.02	78.73	—	78.73	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Kamalaik	19.08	12.94	—	0.05	22.70	0.04	54.81	0.02	54.83	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Mysore	18.73	22.44	—	3.13	16.54	0.01	60.85	—	60.85	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Uttaraghat	—	0.04	—	—	—	—	0.04	—	0.04	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
University of Agricultural Sciences,	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Total	40.29	79.97	26.92	3.26	43.92	0.07	194.43	0.02	194.45	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
KERALA	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Cochin	7.20	22.04	7.15	0.15	3.68	—	40.22	—	40.22	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Kerala Agricultural	—	—	0.02	—	—	—	0.02	—	0.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Total	31.20	77.77	7.15	1.28	20.56	0.26	138.02	—	138.02	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
MANIPUR	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Manipur	9.31	41.37	—	—	0.37	—	51.05	—	51.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Total	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Name of the State & University	A	B	C	D	E	F	Total	Grand Total
Madhya Pradesh	3.48	15.00	-	-	2.86	-	21.34	-
Bhopal	15.06	21.14	-	0.18	2.59	-	38.97	+0.19
Jabalpur	5.45	-	-	-	1.31	-	6.76	-
Jabalpur Kala Sangat	-	-	-	-	6.76	-	6.76	-
Indore	7.70	22.10	-	0.18	3.30	-	33.28	+0.33
Jabalpur	11.51	19.85	-	0.03	7.92	-	39.31	-
Jawaharlal Nehru Kashi	-	0.08	-	-	0.40	-	0.48	-
Jawali	4.20	14.44	-	0.10	2.42	-	21.16	-
Rajiv Shukla	2.02	9.81	-	0.15	1.25	0.07	15.30	-
Saugar	12.70	16.50	11	0.88	10.51	0.17	43.87	+2.35
Vikram	12.29	16.90	-	0.78	5.93	3.90	-	35.90
Total	74.41	135.82	3.11	2.30	40.49	0.24	256.37	-

APPENDIX XIX (Contd.)

Name of the State & University	A	B	C	D	E	F	Total	Sec. III	Grand Total
MAHARASHTRA									
Bombay	20.46	83.73	23.18	4.72	30.25	0.04	162.38	-	162.38
Marathwada	17.43	30.04	-	1.09	7.59	0.69	56.24	-	56.24
Marathwada Kashi	41.08	40.47	-	1.01	1.55	-	83.01	-	83.01
Nagpur	11.69	30.38	6.95	0.33	30.92	0.14	80.41	-	80.41
SNDT, Mumbai	18.46	39.73	-	1.77	64.71	0.08	150.75	-	150.75
Pune	18.46	39.73	-	1.77	64.71	0.08	150.75	-	150.75
Saiyaji	12.03	34.47	3.00	-	0.09	5.00	52.10	-	52.10
Tola	84.06	252.11	33.13	14.51	143.26	2.85	529.92	-	529.92
ORISSA									
Bhubanpur	9.80	6.41	-	2.49	4.76	0.02	23.48	-	23.48
Orissa Unit of Agri & Tech,	8.71	4.89	15.00	1.06	6.69	-	36.29	-	36.29
Samabha	10.94	34.77	-	1.13	4.62	0.14	51.60	-	51.60
Utkal									
Total	29.45	46.07	15.00	4.68	16.01	0.16	111.37	0.35	111.72

APPENDIX XIX (Contd)

Name of the State & University A B C D E F Total Set. III Grand Total

	4.40	25.59	-	0.59	15.20	-	45.78	-	45.78	Churu Narmak Dev
PUNJAB										
Punjab	10.17	148.36	112	0.39	25.33	0.10	185.39	-	185.39	Punjab
Punjab Agriculture	-	1.14	-	-	-	-	1.14	-	1.14	Punjab Agriculture
Punjab	6.84	30.16	-	0.22	9.06	-	36.28	0.23	36.51	Punjab
Total	21.41	195.15	112	1.20	49.61	0.10	268.59	0.23	268.82	
RAJASTHAN										
Jodhpur	10.04	35.41	20.73	-	3.20	-	69.41	1.00	70.41	Jodhpur
Rajasthan	12.11	47.07	-	6.86	20.34	0.35	86.73	-	86.73	Rajasthan
Udaipur	0.15	2.72	-	0.07	6.30	0.17	9.41	-	9.41	Udaipur
Total	22.30	85.23	20.73	6.93	29.84	0.52	165.55	1.00	166.55	

APPENDIX XIX (Contd.)

<i>Name of the State & University</i>	<i>A.</i>	<i>B.</i>	<i>C.</i>	<i>D.</i>	<i>E.</i>	<i>F.</i>	<i>Total</i>	<i>Sec. III</i>	<i>Grand Total</i>
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TAMILNADU

Annamalai	38.96	26.09	25.86	1.27	4.97	—	97.15	—	97.15
Madras	11.09	41.63	—	2.96	11.10	0.11	66.89	—	66.89
		*0.01			*0.02		*0.03		*0.03*
Madurai Kamaraj	17.06	67.21	—	4.71	21.87	0.02	110.87	—	110.87
		*0.01					*0.01		*0.01
Periyar Anna University of Tech.	0.25	47.88	58.78	0.01	6.63	—	113.55	—	113.55
Tamil	—	—	—	—	0.34	—	0.34	—	0.34
Total	67.36	182.81	89.64	8.95	44.91	0.13	388.80	—	388.80
		*0.02			*0.02		*0.04		*0.04

*By adjustment

UTTAR PRADESH

Name of the State & University		A	B	C	D	E	F	Total	Grand Total	Percentage
APRA	Allahabad	2.25	5.18	9.35	0.18	5.98	0.03	40.78	-	10.09
Chandigarh	Chandigarh Sector Azad Unit, of	10.70	14.54	9.35	0.18	5.98	0.03	40.78	-	40.78
Agep	Agep, and Tech.	1.35	2.19	2.19	0.05	5.99	0.04	9.26	-	9.26
Gatwala	Gatwala	-	-	-	-	0.46	-	0.46	-	0.46
GBPUATU	GBPUATU, Lucknow	4.08	17.73	17.73	0.28	0.28	0.02	0.34	-	0.34
Technology	Technology Gorakhpur	-	-	0.04	-	1.45	19.40	0.11	42.77	-
Agep	Agep, and Unit of Agep, and	-	-	-	-	-	-	-	-	-
Kaupur	Kaupur	1.00	3.00	-	0.15	4.10	-	8.25	-	8.25
Kumason	Kumason	0.54	1.28	-	0.50	1.30	0.05	3.36	-	3.36
Lucknow	Meerut	8.95	35.40	-	0.48	30.20	0.01	55.04	-	55.04
Meerut	Meerut	7.55	10.10	-	1.91	2.17	-	21.73	-	21.73
Roorkee	Roorkee	0.80	158.88	40.95	0.06	6.05	-	206.74	-	206.74
Sampurnanand Sanskrati	Sampurnanand Sanskrati	0.13	0.12	0.12	-	-	-	-	-	1.12
Total	Total	45.90	248.30	50.34	4.97	61.80	0.39	410.98	-	410.98

APPENDIX XIX (Contd.)

WEST BENGAL

Name of the State & University	A	B	C	D	E	F	Total	Sec III	Grand Total
Bidhan Chandra Krishi	--	0.40	--	--	0.04	--	0.44	--	0.44
Burdwan	2.03	15.82	3.75	0.49	7.40	0.06	29.49	--	29.49
Calcutta	8.41	108.10	20.48	6.36	19.16	0.05	162.56	--	162.56
Jadavpur	2.50	75.77	59.00	3.65	12.04	--	132.96	0.05	133.01
Kalyani	5.37	31.69	--	0.24	2.52	--	39.82	--	39.82
North Bengal	9.28	21.71	--	0.10	8.76	--	39.71	--	39.71
Rabindra Bharati	12.6	--	8.66	--	0.17	0.41	12.6	--	12.6
Total	36.25	253.35	83.23	10.95	50.33	0.11	434.22	0.05	434.27

APPENDIX XIX (Contd.)

APPENDIX XX

Computer facilities available in Universities

Sl. No	<i>Name of the University</i>	<i>Type of Computer</i>
1	2	3
1.	Aligarh Muslim University	YAX/11/780
2.	Andhra (Waltair)	IBM-1130
3.	Annamalai	TDC-316
4.	Banaras Hindu University	ICL-1904
5.	Bombay	(i) IMB-1620 (ii) TDC-316
6.	Calcutta	IBM-1130
7.	Delhi	IBM-360-44
8.	Dibrugarh	TDC-312
9.	Gauhati	TDC-316
10.	Gujarat (Ahmedabad)	IBM-1620
11.	Jadavpur	B-6700
12.	Jammu	TDC-316
13.	Jawaharlal Nehru University (New Delhi)	R-1020
14.	Jodhpur	TDC-12
15.	Karnatak (Dharwar)	TDC-12
16.	Kerala (Trivandrum)	TDC-316
17.	Kurukshetra	(i) TDC-12 (ii) TDC-316
18.	Madras	IBM-1130
19.	MS University of Baroda	IBM-360-44
20.	Mysore	TDC-1130
21.	Osmania (Hyderabad)	TDC-12
22.	Panjab (Chandigarh)	(i) IBM-1620 (ii) Regional
		VDU Terminals for DEC/ 2050 Com. system has Computer Centre been provided
23.	Poona	ICL-1904 S
24.	Roorkee	(i) TDC-12(two) (ii) DEC-2050
25.	Ranchi	TDC-316
26.	Sardar Patel (Vallabhbhivdayanagar)	IBM-1620
27.	Birla Institute of Technology and Science, Pilani	IBM-1130
28.	Utkal (Bhubaneswar)	IBM-1130
29.	Indian Institute of Science, Bangalore	DEC-1090
30.	Madurai Kamraj University, Madurai	IBM-1130
		system By transfer from A.M.U.

APPENDIX XXI

Statement showing Grants paid to Colleges during the Year 1983-84 (Major Headwise) Under Plan and Section III

Name of State and Universities	A.	B.	C.	D.	E	F.	Total	Sec. III	Grand Total
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State Universities

ANDHRA PRADESH

Andhra	1.03	0.50	-	57.21	0.66	--	59.40	-	59.40
Kakatiya	0.13	0.77	-	4.44	0.03	--	5.37	-	5.37
Nagarjuna	0.11	0.13	--	17.72	-	--	17.96	-	17.96
Osmania	0.12	0.70	--	28.31	4.02	0.03	33.18	-	33.18
Sri Venkateswara	0.28	0.20	--	16.55	1.14	--	18.17	-	18.17
Total	1.67	2.30	-	124.23	5.85	0.03	134.08	-	134.08

ASSAM

Dibrugarh	0.20	0.15	--	12.28	0.47	--	13.10	-	13.10
Gauhati	0.53	0.33	--	27.95	1.69	--	30.50	-	30.50
Manipur	-	0.03	--	2.34	-	--	2.37	-	2.37
Total	0.73	0.51	--	42.57	2.16	--	45.97	-	45.97

BIHAR

Name of State and University

A B C D E F Total Sec III Grand Total

Bhagalpur 0.24 0.40 -- 5.14 0.43 0.04 6.25 6.25

Bihar 0.32 0.14 -- 12.97 0.40 -- 13.37 13.37

Mangaldh 0.22 0.11 -- 10.58 -- 0.02 10.93 10.95

L.N. Mithila 0.17 0.02 -- 24.03 0.38 -- 24.41 24.43

Patna 0.13 -- -- 0.93 0.18 -- 1.11 1.24

Ranach 0.19 0.03 -- 18.51 0.57 -- 19.30 19.30

Total 1.27 0.70 -- 72.16 1.96 0.06 76.15 0.05 76.20

GUJARAT

Name of State and University

A B C D E F Total Sec III Grand Total

Bhavnagar 1.30 -- -- 1.30 1.30 1.30 1.30 1.30

Gujarat 0.03 0.05 -- 34.00 2.79 -- 36.87 36.87

Sardar Patel 0.03 0.05 -- 34.00 2.79 -- 36.87 36.87

Saurashtra 0.03 0.05 -- 9.82 0.36 -- 10.46 10.46

South Gujarat 0.02 -- -- 5.86 0.75 -- 6.56 6.56

Total 0.08 0.10 -- 56.96 4.35 61.49 61.49

HARYANA

Name of State and University

A B C D E F Total Sec III Grand Total

Kurukshetra 0.22 0.09 -- 21.09 5.69 -- 27.08 27.08

Maharshi Dayanand 0.57 0.60 -- 11.76 0.78 0.01 12.21 12.21

Total 0.79 0.17 -- 32.85 6.47 0.01 40.29 40.29

	A	B	C	D	E	F	Total	State
0.04	0.04	0.14	0.27	0.06	0.10	0.10	0.59	37.22
Himachal Pradesh	0.04	0.14	0.27	0.06	0.10	0.10	0.59	37.22
Total	0.04	0.14	0.27	0.06	0.10	0.10	0.59	37.22
10.18	8.28	0.10	7.24	0.22	10.18	9.21	0.47	Kashmir
10.18	8.28	0.10	7.24	0.22	10.18	9.21	0.47	Kashmir
18.46	18.46	0.00	17.45	0.99	18.46	18.46	0.00	Total
18.46	18.46	0.00	17.45	0.99	18.46	18.46	0.00	KARNATAKA

KARNATAKA

	A	B	C	D	E	F	Total	State
0.10	0.10	0.01	7.24	0.22	8.28	9.21	0.47	Kashmir
10.18	8.28	0.10	7.24	0.22	10.18	9.21	0.47	Kashmir
10.18	8.28	0.10	7.24	0.22	10.18	9.21	0.47	Kashmir
18.46	18.46	0.00	17.45	0.99	18.46	18.46	0.00	Total
18.46	18.46	0.00	17.45	0.99	18.46	18.46	0.00	KARNATAKA

JAMMU AND KASHMIR

	A	B	C	D	E	F	Total	State
0.04	0.14	0.27	0.06	0.10	0.10	0.10	0.59	Total
0.04	0.14	0.27	0.06	0.10	0.10	0.10	0.59	Himachal Pradesh
0.04	0.14	0.27	0.06	0.10	0.10	0.10	0.59	Himachal Pradesh
10.18	8.28	0.10	7.24	0.22	10.18	9.21	0.47	Kashmir
10.18	8.28	0.10	7.24	0.22	10.18	9.21	0.47	Kashmir
18.46	18.46	0.00	17.45	0.99	18.46	18.46	0.00	Total
18.46	18.46	0.00	17.45	0.99	18.46	18.46	0.00	JAMMU AND KASHMIR

HIMACHAL PRADESH

	A	B	C	D	E	F	Total	State
0.04	0.14	0.27	0.06	0.10	0.10	0.10	0.59	Total
0.04	0.14	0.27	0.06	0.10	0.10	0.10	0.59	Himachal Pradesh
0.04	0.14	0.27	0.06	0.10	0.10	0.10	0.59	Himachal Pradesh
10.18	8.28	0.10	7.24	0.22	10.18	9.21	0.47	Kashmir
10.18	8.28	0.10	7.24	0.22	10.18	9.21	0.47	Kashmir
18.46	18.46	0.00	17.45	0.99	18.46	18.46	0.00	Total
18.46	18.46	0.00	17.45	0.99	18.46	18.46	0.00	HIMACHAL PRADESH

APPENDIX XXI (Contd.)

Name of State and University										
A	B	C	D	E	F	Total	Sec. III	Grand Total	State	Total
KERALA										
Calicut	0.35	0.16	..	19.11	0.80	..	40.42	..	41.42	41.85
Kerala	0.99	0.16	..	39.49	1.46	..	41.30	0.65	41.95	42.27
Total	0.44	0.32	..	78.60	2.26	..	81.82	0.65	82.55	82.77
MAHARASHTRA										
Bombay	0.20	0.66	..	49.75	2.17	0.06	52.66	..	52.66	52.96
Marathwada	0.39	0.08	..	32.18	4.32	0.04	37.10	..	37.10	37.40
Nagpur	0.06	0.77	..	35.55	1.19	..	37.99	..	37.99	38.10
Poona	13.47	29.64	..	46.62	6.25	..	52.10	0.40	52.10	52.40
Shivaji	0.13	0.24	..	11.81	0.20	..	12.21	..	12.21	12.36
SNDT Womans	..	..	..	..	..	..	..	..	..	12.78
Total	14.25	31.59	..	127.69	19.72	..	142.46	1.10	143.56	145.61

APPENDIX XXI (Contd.)

Name of State and University	A.	B.	C	D	E.	F.	Total	Sec. III	Grand Total
ORISSA									
Brahmapur	0.82	0.22	-	3.08	0.25	-	4.37	0.02	4.39
Sambalpur	0.23	0.57	0.10	10.97	1.04	-	12.91	-	12.91
Utkal	1.16	1.32	0.07	9.89	0.52	-	12.96	-	12.96
Total	2.21	2.11	0.17	23.94	1.81	-	30.24	0.02	30.26
PUNJAB									
Guru Nanakdev	0.16	0.05	-	26.34	0.20	-	26.75	-	26.75
Panjab	0.25	0.34	-	22.18	0.78	-	23.55	-	23.55
Punabi	0.03	-	-	9.22	0.23	-	9.48	-	9.48
Total	0.44	0.39	-	57.74	1.21	-	59.78	-	59.78
RAJASTHAN									
Jodhpur	0.04	-	-	0.36	0.03	-	0.33	-	0.33
Rajasthan	1.18	1.40	-	44.25	3.45	0.04	50.32	-	50.32
Udaipur	0.01	0.01	-	2.64	0.22	-	2.88	-	2.88
Total	1.23	1.41	-	47.15	3.70	0.04	53.53	-	53.53

APPENDIX XXX (Contd.)

TAMINADA

	Total	2.24	4.64	—	110.10	4.79	—	121.77	1.13	122.90
Disbursements	0.46	0.05	—	19.07	0.42	—	20.00	0.80	20.80	

UTTAR PRADESH

Name of State and University	A	B	C	D	E	F	Total	Sec III	Group
WEST BENGAL									
Burdwan	0.13	0.52	—	48.74	0.73	0.02	50.14	0.03	50.17
Calcutta	2.21	1.63	1.15	50.25	0.46	0.08	55.78	—	55.78
Jadavpur	—	—	—	0.45	0.01	—	0.46	—	0.46
Kalyani	—	—	—	0.76	—	—	0.76	—	0.76
North Bengal	0.29	0.12	—	10.56	0.17	—	11.14	—	11.14
Total	2.63	2.27	1.15	110.76	1.37	0.10	118.28	0.03	118.31
CENTRAL UNIVERSITIES									
Delhi	0.10	—	—	2.19	—	—	2.20	—	2.20
North Eastern Hill	1.60	1.65	7.27	47.97	2.45	0.21	61.15	—	61.15
Total	1.69	1.73	7.27	51.77	2.45	0.21	65.12	—	65.12
Central Colleges	15.05	62.55	8.95	1381.99	84.40	1.00	1543.50	2.31	1545.81
Total Universities	806.86	2773.98	566.18	80.69	1276.98	7.12	5511.21	2.70	5513.91
Grand Total Plan	841.91	2836.53	574.77	1432.08	1361.38	8.12	2054.71	5.01	2059.72
Section III Colleges/ Universities	41.08	13.41	—	0.04	3.03	4.79	47.59	—	47.59

No	Institution	Higher	Humanities	Science	Engg &	Arts of	Arts	Tech	Others	Artharts	Engg	Total	Second III	Second II	Grand Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Summary of Plan Expenditure-1983-84															
75	Central Universities	87.59	298.11	72.66	1.36	426.34	0.15	888.41	0.15	888.46	0.15	3,141	2,793.22	55.24	3,511.21
2	Institutions deemed to be Universities	32.14	299.32	55.24	0.04	74.68	0.55	455.23	0.90	456.13	0.22	1,664.94	1,416.75	6.42	3,160.55
3	State Universities	64.13	2,190.55	82.82	87.82	76.45	77.75	76.45	1.65	4,169.22	1.65	11,085.96	11,085.96	1.65	12,263.56
4	Colleges	35.05	62.55	151.91	85.16	1.00	1.51	50.23	1.31	1,551.81	1.31	4,010.55	4,010.55	1.31	4,522.40
5	Non-Government Institutions	3.69	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3	89.3
6	Other Misc Exp (i.e CEP/TA/DA)	1.91	12.41	12.41	12.41	12.41	12.41	12.41	12.41	12.41	12.41	12.41	12.41	12.41	12.41
TOTAL		841.91	2,896.53	574.77	1,427.00	1,361.88	11.80	7,058.39	5.01	7,063.40	4.44	1,088	1,088	4.44	4,774
Grand Total		841.91	2,896.53	574.77	1,427.00	1,361.88	11.80	7,058.39	5.01	7,063.40	4.44	1,088	1,088	4.44	4,774
Grand Total		841.91	2,896.53	574.77	1,427.00	1,361.88	11.80	7,058.39	5.01	7,063.40	4.44	1,088	1,088	4.44	4,774
Plan & Sectoral III		11.33	11.33	11.33	11.33	11.33	11.33	11.33	11.33	11.33	11.33	11.33	11.33	11.33	11.33

APPENDIX XXII

Universities offering Correspondence Courses

Sl. No.	Name of the University	Courses offered	Total No. of students enrolled		
			1981-82	1982-83	1983-84
1	2	3	4	5	6
1. Delhi		B.A.	2,920	4,695	7,178
		B. Com.	2,656	3,986	5,255
		B.Com. (Hons.)	691	803	969
		M.A. (Hindi)	275	204	215
		M.A. (Pol. Sc.) One year bridge Course	229	134	169
2.	Meerut	M.A.	543	NA	39
3.	Bhopal	B.A.		1925	NA
		B.Com.			
4. Sri Venkateswara		B.A.	227	178	177
		B.Com.	269	155	109
		M.A. (English)		144	98
		M.A. (Economics)		63	62
		M.Com		136	238
5. Utkal		I.A.	403		195
		I. Com.	83	NA	21
		B.A.	228		124
		B.Com.	82		38
6. Jammu		B.A.	169		
		B.Com.			
		B.Ed.	413		
		LL.B.	571		
7. Madurai Kamaraj		B.A.	11,203	12,266	
		B.Com.	15,076	14,340	
		B.Sc.	1,453	1,449	
		M.A.(History)	3,008	2,960	
		M.A. (Economics)	2,328	2,292	
		M.A. (Tamil)	1,958	1,484	
		M.A. (English)	3,653	2,566	
		M.Com.	3,788	4,869	
		B.G.L. (Professional)	NA	NA	
		M.A. (Political Science)	4,133	3,661	
8. Panjab		Pre-University	1,037	1,007	
		B.A.	3,927	3,756	
		M.A. (English)	918	930	

APPENDIX XXII (Contd.)

1	2	3	4	5	6
Panjab (Contd.)					
	M.A. (Economics)	903	721		
	M.A. (History)	508	571		
	M.A. (Political Science)	255	198		
	M.A. (Public Admn.)	265	274		
	M.A. (Hind.)	777	798		
	M.A. (Punjabi)	228	209		
		127	111		
9. Punjabi	Pre-University	718	379		
	B.A.	1,979	1,021		
	M.A. (Punjabi)	318	246		
	M.A. (English)	302	227		
	M.A. (Pol. Sc.)	229	156		
	M.A. (History)	196	165		
	M.A. (Economics)	325	247		
10. Mysore	B.A.	8,790	9,104		
	B.Com.	2,203	2,726		
	B.Ed.	—	428		
	B.G.L.	264	177		
	M.A. (Kannada)	428	345		
	M.A. (English)	416	345		
	M.A. (History)	764	605		
	M.A. (Political Science)	765	617		
	M.A. (Sociology)	526	379		
11. Bombay	F.Y. Arts	844	1,016		
	S.Y. Commerce	511	759		
	S.Y. B. Com.	308	477		
	S.Y. B. Com.	161	312		
	B.A.	1,167	1,089		
	M. Com.	1,976	2,341		
	Diploma in Financial Management	420	496		
	Diploma in Operations Research for Management	84	113		
12. C.I.E.F.L. (Hyderabad)	P.G.C.T.E.	528			
	P.G.D.T.E.	125			
	M.A. in French	23	NA		
	German	6			
	Russian	35			
13. Osmania	B.A.	553	745	510	
	B.Com.	794	1,106	858	
14. Annamalai	B.Com	361	430		
	B.Ed	6,000	7,851		

APPENDIX XXII (Contd.)

1	2	3	4	5	6
Annamalai (Contd.)		Diploma in Law	1,672	1,802	
		B.A.	187	280	
		B.Lit.	361	430	
		B.A.L.	576	173	
		M.A.	2,637	2,305	
		M.Sc.	1,902	1,748	
		M.Com.	473	410	
		M.Ed	2,193	2,959	
15. Kerala		Pre-Degree	1,363	1,086	
		B.A.	602	444	
		B.Com	372	265	
16. Allahabad		B.A	473	603	BA-I 722;
		B.Com.	183	221	B.A. II, 237
					B.Com. I
					223. B.
					Com II 70
17. Kashmir		B.A	197	186	
		B.Com.	201	286	
		LL.B.			
		B.Ed.	252	250	
18. Andhra		B.A.	7,336	10,328	13,774
		B.Com.	2,378	2,828	3,435
		M.A. (Eco.)	315	299	452
		M.Com.	590	543	976
19. Himachal Pradesh		B.A.	1,436		
		M.Ed.	4,566		
		M.Com.	1,380		
		M.A. (English)	737		
		M.A. (History)	422	NA	
		M.A. (Eco.)	1,075		
		M.A. (Pol. Sc.)	704		
		M.A. (Hindi)	472		
		M.A. (Sanskrit)	121		
		P.U.C.	788		
20. Udaipur		B.A./B.Com.	347	369	
21. Rajasthan		B.A.	448	2,259	
		B.Com.	305	166	
		M.Com.	1,910	1,702	
		M.A. (Hindi)	409	381	
		M.A. (History)	454	358	
		M.A. (Sociology)	687	631	
		M.A. (Pol. Sc.)	621	547	

APPENDIX XXII (Contd.)

1	2	3	4	5	6
Rajasthan (Contd.)					
		M A. (Pub Admn)	689	695	
		M A (Eco)	1,227	732	
		B Ed	296	296	
22	S.N.D.T. Women's	B A	5,309	6,087	B A
		B Com.			B Com. 3,677
23	Patna	I.A	766	504	
		I Com	560	351	
		B.A.	351	371	
		B Com	281	341	
24	Allahabad	B.A -I			722
		B.A -II			237
		B Com.-I			223
		B.Com.-II			70

APPENDIX XXIII

Information regarding posts of Lecturers in University Teaching Departments and those held by SC/ST candidates as on 1st January, 1983

Sl. No.	<i>Name of the University</i>	<i>Total No. of Lecturers</i>	<i>No. of posts of Lecturers held by SC/ST</i>	<i>Percentage held by SC/ST</i>
1	2	3	4	5
ANDHRA PRADESH				
1.	Andhra	419	36	9
2.	Hyderabad	45	—	—
3.	Kakatiya	138	6	4
4.	Sri Venkateswara	221	13	6
5.	C.I.F.F.L. Hyderabad	37	—	—
ASSAM				
6.	Dibrugarh	63	2	3
7.	Gauhati	165	—	—
BIHAR				
8.	Bhagalpur	194	—	—
GUJARAT				
9.	Bhavnagar	117	1	0.8
10.	Gujarat	37	—	—
11.	Sardar Patel	78	—	—
12.	Saurashtra	28	1	4
13.	South Gujarat	30	—	—
HARYANA				
14.	Haryana Agricultural	777	3	—
15.	Kurukshetra	214	3	1
16.	Maharishi Dayanand	199	2	1
HIMACHAL PRADESH				
17.	Himachal Pradesh	122	1	0.8
18.	H.P. Agricultural	14	9	4
KARNATAK				
19.	Bangalore	170	7	4
20.	Gulbaraga	55	3	36
21.	Karnatak	199	2	1
22.	Mangalore	20	1	5
KERALA				
23.	Calicut	86	8	9
24.	Cochin	68	1	1

APPENDIX XXIII (Contd.)

1	2	3	4	5
25.	Kerala	94	8	8
26.	Kerala Agricultural	216	9	4
MADHYA PRADESH				
27.	Indira Kala Sangeet	5	—	—
28.	Hari Singh Gaour	132	1	—
29.	Jiwaji	20	—	—
30.	Vikram	38	—	—
MAHARASHTRA				
31.	Bombay	72	3	4
32.	Konkon Krishi Vidyapeeth	172	2	1
33.	Nagpur	151	20	13
34.	Shivaji	97	4	4
35.	Tata Institute of Social Science	16	—	—
36.	Panjabrao Krishi Vidyapith	394	34	9
37.	Mahatmaphule Krishi	318	17	5
MEGHALAYA				
38.	N.E.H. University	179	56	31
ORISSA				
39.	Berhampur	47	—	—
40.	Orissa University of Agri. & Tech.	240	—	—
PANJAB				
41.	Gurunanak Dev	156	1	—
42.	Panjab	395	—	—
RAJASTHAN				
43.	B.I.T.S.	179	—	—
TAMIL NADU				
44.	Bharthiar	12	—	—
45.	Tamil Nadu Agri. Univ.	969	16	2
46.	Gandhi Gram Rural Instt.	58	—	—
47.	Tamil	4	—	—
UTTAR PRADESH				
48.	Agra	580	—	—
49.	Kashi Vidyapeeth	100	1	1
50.	Kumaon	173	2	1
51.	Lucknow	319	1	0.2
52.	Roorkee	178	—	—
53.	Sampurnanand Sanskrit University	46	—	—
54.	Gurukul Kangri	32	—	—
55.	Dayalbagh Educational Institute	89	—	—

APPENDIX XXIII (Contd.)

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5

WEST BENGAL

56. Burdwan		Not available	No one belongs to SC ST	
57. Visva-Bharati		194	3	1
58. North Bengal		56	--	--

DELHI

59. J N. University		135	4	3
60. Jamia Millia Islamia, New Delhi		127	--	--
61. School of Planning & Architecture		13	--	--

*Indicates total Staff strength viz., professors, readers and lecturers.

Note: Information has been tabulated only in respect of Universities which have furnished the data.

APPENDIX XXIV

Percentage of Women Enrolment to Total Enrolment: Statewise 1979-80, 1980-81, 1981-82, 1982-83 and 1983-84

Sl. No.	State/Union Territory	1979-80		
		Total Enrolment	Women Enrolment	Percentage of Women
1	2	3	4	5
1	Andhra Pradesh	1,65,037	41,394	25.1
2	Assam	59,712	15,857	26.6
3	Bihar	1,25,035	15,123	12.1
4	Gujarat	1,69,878	47,009	27.7
5	Haryana	42,592	19,075	30.5
6	Himachal Pradesh	11,849	3,147	26.6
7	Jammu & Kashmir	17,993	5,710	31.7
8	Karnataka	1,82,675	41,164	22.5
9	Kerala	1,06,297	48,654	45.8
10.	Madhya Pradesh	2,00,134	48,914	24.4
11.	Maharashtra	3,34,211	97,904	29.3
12.	Manipur	*	*	*
13.	Meghalaya/Nagaland	7,170	2,272	31.7
14.	Orissa	50,412	8,072	16.0
15.	Punjab	1,12,139	43,330	38.6
16.	Rajasthan	1,44,441	26,765	18.5
17.	Tamil Nadu	1,84,295	54,505	29.6
18.	Uttar Pradesh	4,31,584	79,322	18.4
19.	West Bengal/Tripura/Sikkim	2,03,274	62,072	29.8
20.	Delhi	74,861	28,753	38.4
Total		26,48,579	6,89,042	26.0

*Included in Assam

APPENDIX XXIV (Contd.)

1	2	1980-81		
		3	4	5
1.	Andhra Pradesh	1,93,416	50,931	26.3
2.	Assam	47,517	11,945	25.1
3.	Bihar	1,39,341	18,221	13.1
4	Gujarat	1,74,786	50,535	28.9
5.	Haryana	58,900	18,864	32.0
6.	Himachal Pradesh	12,986	3,676	28.3
7.	Jammu & Kashmir	21,968	7,641	34.8
8.	Karnataka	2,00,829	49,866	24.8
9.	Kerala	1,13,352	53,211	46.9
10.	Madhya Pradesh	2,12,823	54,277	25.5
11.	Maharashtra	3,35,312	1,04,085	31.0
12.	Manipur	6,601	2,229	33.8
13.	Meghalaya/Nagaland	7,416	2,248	30.3
14.	Orissa	57,194	10,177	17.8
15.	Punjab	1,12,103	44,566	39.8
16.	Rajasthan	1,44,130	29,446	20.4
17.	Tamil Nadu	2,05,382	63,630	31.0
18.	Uttar Pradesh	4,45,677	84,824	19.0
19.	West Bengal/Tripura/Sikkim	1,89,849	59,473	31.3
20.	Delhi	72,855	28,680	39.4
	Total	27,52,437	7,48,525	27.2

State	Population	Area (sq km)	Density (per sq km)	Capital	Total
1. Andhra Pradesh	2,16,441	54,481	24,9	—	5
2. Assam	58,781	14,583	24,8	Dis. Bishnupur	27,7
3. Bihar	1,66,473	23,608	14,2	Patna	37,3
4. Gujarat	1,95,179	57,202	29,3	Gandhinagar	48,0
5. Haryana	59,534	19,952	33,5	Chandigarh	57,0
6. Himachal Pradesh	14,771	3,985	27,0	Shimla	57,5
7. Jammu & Kashmir	20,286	7,609	27,0	Kashmir	57,0
8. Karnataka	2,15,861	53,967	25,0	Bangalore	57,0
9. Kerala	1,19,551	57,448	48,1	Thiruvananthapuram	57,0
10. Madhya Pradesh	2,18,931	57,385	26,2	Indore	57,0
11. Maharashtra	3,48,814	11,12,039	32,1	Mumbai	57,0
12. Manipur	8,098	2,909	35,0	Imphal	57,0
13. Meghalaya/Nagaland	8,628	2,798	32,4	Mawlynnong	57,0
14. Odisha	61,666	10,949	17,8	Bhubaneswar	57,0
15. Punjab	1,12,788	46,651	41,4	Ludhiana	57,0
16. Rajasthan	1,53,312	31,047	20,3	Jaipur	57,0
17. Tamil Nadu	2,19,286	69,817	31,8	Chennai	57,0
18. Uttar Pradesh	4,55,949	89,541	19,6	Lucknow	57,0
19. West Bengal/Tripura/Sikkim	2,09,949	65,818	31,4	Shillong	57,0
20. Delhi	86,223	34,915	40,5	Delhi	57,0
21. Jharkhand	2,16,441	54,481	24,9	—	5

APPENDIX XXIV (Contd.)

		1982-83		
1	2	3	4	5
1.	Andhra Pradesh	2,44,332	59,412	24.3
2.	Assam	65,930	16,621	25.2
3.	Bihar	1,98,018	29,189	14.7
4.	Gujarat	1,98,438	62,367	31.4
5.	Haryana	65,022	22,074	33.9
6.	Himachal Pradesh	16,305	4,402	27.0
7.	Jammu & Kashmir	20,190	7,213	35.7
8.	Karnataka	2,32,090	57,881	24.9
9.	Kerala	1,25,111	61,287	49.0
10.	Madhya Pradesh	2,25,580	62,505	27.7
11.	Maharashtra	3,73,385	1,17,375	31.4
12.	Manipur	8,555	2,977	34.8
13.	Meghalaya/Nagaland	8,207	2,651	32.3
14.	Orissa	64,853	12,988	20.0
15.	Punjab	1,17,580	49,603	42.2
16.	Rajasthan	1,54,863	30,959	20.0
17.	Tamil Nadu	2,29,075	78,116	34.1
18.	Uttar Pradesh	4,55,305	90,837	20.0
19.	West Bengal/Tripura/Sikkim	2,38,498	73,357	30.8
20.	Delhi	91,756	38,340	41.8
All India		31,33,093	8,80,256	28.1

(LIVII)

*Estimated.

	1	2	3	4	5	Total	33,59,323	9,76,795	29.1
1. Andhra Pradesh	2,73,176	72,064	26 4						
2. Assam	71,118	17,421							
3. Bihar	2,28,441	34,955	15.3						
4. Gujarat	2,04,697	67,220	32.8						
5. Haryana	69,310	22,438	32 4						
6. Himachal Pradesh	18,319	5,208	28.4						
7. Jammu & Kashmir	21,348	9,037	42.3						
8. Karnataka	2,59,804	70,396	27.1						
9. Kerala	1,40,226	69,540	49.0						
10. Madhya Pradesh	2,37,382	66,200	27.9						
11. Maharashtra	3,97,280	1,32,625	33.4						
12. Manipur	10,514	3,762	35.8						
13. Meghalaya Nagaland	10,367	3,447	33.2						
14. Orissa	72,642	14,336	19.7						
15. Punjab	1,22,272	50,913	41 6						
16. Rajasthan	1,68,414	36,741	21 8						
17. Tamil Nadu	2,47,226	83,421	33.7						
18. Uttar Pradesh	4,60,793	1,00,845	21.9						
19. West Bengal/Tripura/Sikkim	2,48,559	74,816	30 1						
20. Delhi	97,435	41,410	42.5						

1983-84*

APPENDIX XXI

Sexwise Distribution of Enrollment: Stagewise 1971-72 to 1982-83

Year	Graduate			Postgraduate			Research		
	T	W	%	T	W	%	T	W	%
1971-72	18,35,077	4,11,037	22.2	1,80,343	45,952	25.5	14,995	1,097	20.7
1972-73	19,20,364	NA	NA	1,95,307	NA	NA	16,443	NA	NA
1973-74	19,64,432	4,54,972	23.2	2,14,691	53,871	25.1	16,417	3,605	22.0
1974-75	20,75,039	4,84,382	23.3	2,34,114	55,572	23.7	17,977	4,107	22.8
1975-76	21,65,919	5,26,260	24.5	2,19,826	54,824	24.9	18,381	4,447	24.4
1976-77	21,41,542	NA	NA	2,18,128	NA	NA	21,910	NA	NA
1979-80	23,07,924	5,99,493	26.0	2,65,251	71,963	27.1	29,570	7,331	24.8
1980-81	24,01,485	6,52,808	27.2	2,73,337	77,001	28.2	32,171	8,780	27.3
1981-82	25,88,759	7,16,249	27.7	2,85,892	81,645	28.6	34,588	9,581	27.7
1982-83	27,57,893	7,73,342	28.0	2,46,103	86,380	29.2	36,731	10,678	29.1
1983-84*	29,32,451	8,50,139	29.0	3,31,044	1,01,835	30.8	42,697	11,213	26.3

*Estimated

Year	Diploma/Certificate	Total	T		W		%		T		W		%		NA	W=Women Available	T=Total Enrollment	F=Female
			Y	M	Y	M	Y	M	Y	M	Y	M	Y	M				
1971-72	14,626	8,340	34,1	20,65,041	4,68,096	22,7												
1972-73	15,991	NA	NA	21,48,197	NA	NA												
1973-74	18,485	8,378	31,6	22,34,385	5,20,825	23,1												
1974-75	19,411	8,948	22,7	23,66,591	5,53,009	23,1												
1975-76	19,038	9,601	23,4	23,36,109	5,99,162	23,5												
1976-77	19,981	NA	NA	24,31,563	6,27,346	23,8												
1977-78	19,981	9,601	23,4	23,36,109	5,99,162	23,5												
1978-79	19,981	NA	NA	24,31,563	6,27,346	23,8												
1979-80	45,814	10,255	32,4	26,48,579	6,19,045	26,0												
1980-81	45,444	9,986	31,9	27,32,497	7,48,325	27,2												
1981-82	45,871	9,729	31,5	29,32,066	8,16,704	27,7												
1982-83	47,366	9,481	31,7	31,03,071	8,80,159	27,8												
1983-84*	51,101	13,408	32,2	33,39,323	9,76,795	29,2												

APPENDIX XXVI

Distribution of Student Enrolment: Sexwise and Facultywise 1971-72 to 1982-83

Year	Arts			Science			Commerce			
	T	W	%	T	W	%	T	W	%	
C.S.	1971-72	9,06,068	3,03,063	33.4	5,05,925	1,01,215	20.0	2,89,946	10,459	3.6
	1972-73	9,61,044	NA	NA	4,94,599	NA	NA	3,18,888	NA	NA
	1973-74	10,03,575	3,41,238	34.0	4,73,685	1,01,344	21.4	3,40,392	16,121	4.7
	1974-75	10,56,077	3,62,979	34.0	4,63,441	1,06,203	22.9	2,89,504	22,127	5.6
	1975-76	10,79,990	3,92,137	36.4	4,63,441	1,11,714	24.1	4,14,946	27,551	6.6
	1976-77	10,78,967	NA	NA	4,43,013	NA	NA	4,30,387	NA	NA
	1979-80	10,76,076	3,97,914	37.0	5,08,763	1,40,098	27.5	5,16,170	68,051	13.2
	1980-81	11,14,417	4,20,276	37.7	5,35,199	1,53,868	28.7	5,52,913	88,607	15.9
	1981-82	11,90,177	4,54,990	38.2	5,78,766	1,65,666	28.6	6,28,031	1,04,964	16.7
	1982-83	12,59,587	4,87,620	38.7	6,21,545	1,79,650	28.8	6,69,813	1,16,837	17.4
	1983-84*	13,13,154	5,51,211	42.0	6,64,491	1,98,210	29.8	7,53,485	1,15,516	15.0

APPENDIX XXVI (Contd.)

Year	Education			Engg./Tech			Medicine		
	T	W	%	T	W	%	T	W	%
1971-72	63,658	24,003	37.7	82,804	9	1.1	89,921	19,919	22.2
1972-73	67,543	NA	NA	82,674	NA	NA	99,643	NA	NA
1973-74	76,680	27,571	39.0	86,665	1,026	1.2	1,02,242	21,314	20.8
1974-75	77,179	29,055	37.6	90,685	1,341	1.5	1,06,340	20,992	19.7
1975-76	76,641	30,110	39.3	96,067	2,061	2.1	1,05,140	19,208	18.3
1976-77	75,512	NA	NA	1,00,040	NA	NA	1,13,151	NA	NA
1979-80	72,981	34,497	47.3	1,18,607	4,428	3.7	1,12,194	24,426	21.8
1980-81	71,204	33,708	47.3	1,28,937	4,949	3.8	1,10,020	26,997	24.4
1981-82	71,168	34,383	48.3	1,30,189	5,866	4.5	1,13,794	29,792	26.2
1982-83	74,167	34,893	47.0	1,41,558	7,173	5.1	1,13,902	31,648	27.8
1983-84*	74,009	43,891	59.3	1,57,732	6,706	4.3	1,21,388	34,477	28.4

*Estimated.

T=Total Enrolment W=Women Enrolment

N.A.=Not available

APPENDIX XXXI (contd.)

77	15470	201,001	31	808	9016	11	1121	10124	188184
74	15176	151,031	84	424	4638	04	5651	105307	188285
71	12309	124,445	84	350	1218	51	1390	111318	281961
69	11948	124,371	11	692	1641	31	1111	112191	188061
67	10925	117,448	27	202	5451	72	1011	10192	187848
NA	NA	10999	NA	NA	NA	NA	NA	109910	197677
65	10591	141,295	14	16	1119	13	384	10100	197576
64	10883	118,461	12	98	9020	60	222	125293	197475
63	6913	103,511	80	98	9019	80	223	105280	197374
VN	VN	55886	NA	NA	5363	VN	NA	225282	197273
63	10334	104,458	10	65	9009	11	122	11652	197172

FACULTY

APPENDIX XXVI (Contd.)

Total Other

% M L % M L

Estimated	T=Total Enrollment	W=Women Enrollment	N.A.=Not Available	
971-72	10,219	4,105	40,2	20,65,041
972-73	10,720	N.A.	21,68,107	N.A.
973-74	11,262	6,269	55,7	22,34,385
974-75	12,475	4,072	32,6	23,66,541
975-76	11,649	4,205	36,1	24,26,109
976-77	14,255	N.A	N.A.	24,13,563
977-78	18,943	7,350	38,8	26,48,579
978-79	18,494	7,352	39,8	27,52,437
979-80	18,931	7,350	38,8	26,48,579
980-81	26,0			6,89,042
981-82	18,492	7,352	39,8	27,52,437
982-83	18,264	6,740	36,9	31,33,093
983-84	22,613	9,325	41,2	33,51,323
984-85	29,1			9,76,795

EXXIII